PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Koki UCHIYAMA

Docket No: CA1073

Appln. No.: 09/870,581

Group Art Unit: 2167

Confirmation No.: 9236

Examiner: M. Le

Filed: May 30, 2001

For: DISTRIBUTED MONITORING SYSTEM PROVIDING KNOWLEDGE SERVICES

DECLARATION UNDER 37 C.F.R. § 1.131

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Koki Uchiyama, hereby declare and state as follows:

1. I am a citizen of Japan (a WTO member country), and the sole inventor named in the above-captioned U.S. Application No. 09/870,581, filed May 30, 2001, which claims priority at least to U.S. Application No. 60/208,394 filed May 30, 2000.

2. Well prior to April 7, 2000, the U.S. Filing Date of U.S. Patent No. 09/544,772, I conceived the invention as described and claimed in the above referenced application in Japan, as evidenced by the following:

3. Prior to April 7, 2000, having earlier conceived the idea as set forth in the specification of the above referenced application, I discussed my idea with the Japanese law firm of Chu-Oh International Attorneys at Law, which recommended for me to file a patent application in the United States.

4. Prior to April 7, 2000, I prepared a document that included the subject matter of my invention. This document is attached as Exhibit A. In accordance with the provisions under U.S. law, the dates of this document have been redacted. Exhibit A discloses various details of my invention, including the features disclosed in at least the pending independent claims 1, 2, 21 and 22 of the present application. More specifically, the evidence of Exhibit A discloses the features recited in claims 1, 2, 21 and 22 of the present application, as explained by the following tables:

Claim 1	Exhibit A
A method of retrieving information from one or more information sources in a search space, said method comprising:	Information sources are contents on the internet (i.e., home pages (URLs)); search space is the internet. See page 21 listing sample retrieved URLs
providing central program code at a central computer; said central program code being adapted for maintaining a central database of data records, for accessing the information from said information sources, and for comparing said data records with said information from said information sources;	See Page 19; central program code and computer are all parts except (1) and (2); database is maintained based on information in "People/Statistics", "People" and "Human decision/Human actions"; information from said information sources is URLs of internet web sites stored in HTML; comparing of data records occurs in FILTER
recognizing communication between said central program code and remote program code at at least one remote terminal; said remote program code being adapted for monitoring user activity of at least one user, for collecting monitored data related to said user activity, and for transmitting said monitored data to said central program code;	Page 14 and 18, "monitoring by software with browser built-in" is the remote program code adapted for monitoring at the terminal (terminals are also shown at (1) on page 19); page 22, "collection of knowledge" is collecting monitored data related to user activity; embedded into browser at page 19; transmitted to central code by arrow after (2)
supplementing, at said central computer, said data records in accordance with said monitored data to provide an augmented central database;	In addition to the above monitoring, voting results are passed to the central database, see "voting" of page 19; details of voting at page 26
responsive to a request for information from said at least one user, identifying	Request for information is at field next to FIND button on page 21; candidate response

candidate response information from said information sources at said central computer;	information is list of a subset of the URLs stored in HTML database; that corresponds to the request - on page 19, this is displayed as the list of 5 links; information sources are the URLs on page 21, and are stored in the HTML database on page 19
comparing contents of said augmented central database with said request and with said candidate response information at said central computer; and	Page 19 - voting results are compared with the list of URLs, and the request for information in the FIND button; this is done at FILTER
as a result of said identifying and said comparing, transmitting, to said remote program code at said at least one remote terminal, data concerning one or more of said information sources which contain information relevant to said request so as to progressively tailor information retrieval results for said at least one user and provide said information retrieval results to said at least one user.	Arrow from (4) to (1) on page 19 as transmission of data concerning one of information sources, containing information relevant to the request in the FIND button; Progressive tailoring is (5) - frequent use will make more refined. See also results displayed on page 21.

Claim 2	**Exhibit A**
An information retrieval system for accumulation and retrieval of data related to one or more information sources in a search space, said system comprising:	Page 19 - system overview; data is accumulated from the browser, and data is retrieved, with respect to one or more information sources INFO as contents on the internet (i.e., home pages (URLs)); search space is the internet. See page 21 listing retrieved URLs
remote program code at at least one remote terminal; said remote program code being adapted for monitoring user activity of at least one user, for collecting monitored data related to said user activity and to each of said information sources accessed by said at least one user, and for transmitting said monitored data; and	Page 14 and 18, "monitoring by software with browser built-in" is the remote program code adapted for monitoring at a terminal (terminals are also shown at (1) on page 19); page 22, "collection of knowledge" is collecting monitored data related to user activity; embedded into browser at page 19; transmitted to central code by arrow after (2)
a central computer having central program code receiving said monitored data transmitted from said remote program code ;	See Page 19; central program code and computer are all parts except (1) and (2); monitored data is received at (2) from the

said central program code being adapted for maintaining a central database of data records, for accessing information from said information sources, and for comparing said data records with said information from said information sources;	remote program code at browsers (1); central database is maintained based on information in "People/Statistics", "People" and "Human decision/Human actions"; information INFO from said information sources is URLs of internet web sites stored in HTML; comparing of data records occurs in FILTER
wherein said central program code supplements said data records in accordance with said monitored data to provide an augmented central database,	In addition to the above monitoring, voting results are passed to the central database, see "voting" of page 19; details of voting at page 26
said central computer identifying candidate response information from said information sources in response to a request for information from said at least one user, comparing contents of said augmented central database with said request and with said candidate response information, and transmitting, to said remote program code at said at least one remote terminal, data concerning one or more of said information sources which contain information relevant to said request so as to progressively tailor information retrieval results for said at least one user and provide said information retrieval results to said at least one user.	Request for information is at field next to FIND button on page 21; candidate response information is list of a subset of the URLs stored in HTML database; that corresponds to the request - on page 19, this is displayed as the list of 5 links; information sources are the URLs on page 21, and are stored in the HTML database on page 19; Page 19 - voting results are compared with the list of URLs, and the request for information in the FIND button; this is done at FILTER; Arrow from (4) to (1) on page 19 as transmission of data concerning one of information sources, containing information relevant to the request in the FIND button; Progressive tailoring is (5) - frequent use will make more refined. See also results displayed on page 21.

Claim 21	**Exhibit A**
A method of retrieving information from one or more information sources in a search space, said method comprising:	Information sources are contents on the internet (i.e., home pages (URLs)); search space is the internet. See page 21 listing retrieved URLs
providing central program code at a central computer; said central program code being adapted for maintaining a central database of data records, for accessing the information from said information sources, and	See Page 19; central program code and computer are all parts except (1) and (2); database is maintained based on information in "People/Statistics", "People" and "Human decision/Human actions"; information from

for comparing said data records with said information from said information sources;	said information sources is URLs of internet web sites stored in HTML; comparing of data records occurs in FILTER
recognizing communication between said central program code and remote program code at each of a plurality of remote terminals; said remote program code being adapted for monitoring user activity of each of a plurality of users, for collecting monitored data related to said information retrieval activity, and for transmitting said monitored data to said central program code;	Page 14 and 18, "monitoring by software with browser built-in" is the remote program code adapted for monitoring at multiple terminals (terminals are also shown at (1) on page 19); page 22, "collection of knowledge" is collecting monitored data related to user activity; embedded into browser at page 19; transmitted to central code by arrow after (2)
supplementing, at said central computer, said data records in accordance with said monitored data to provide an augmented central database;	In addition to the above monitoring, voting results are passed to the central database, see "voting" of page 19; details of voting at page 26
responsive to a request for information from at least one user, identifying candidate response information from said information sources at said central computer;	Request for information is at field next to FIND button on page 21; candidate response information is list of a subset of the URLs stored in HTML database; that corresponds to the request - on page 19, this is displayed as the list of 5 links; information sources are the URLs on page 21, and are stored in the HTML database on page 19
comparing contents of said augmented central database with said request and with said candidate response information at said central computer; and	Page 19 - voting results are compared with the list of URLs, and the request for information in the FIND button; this is done at FILTER
as a result of said identifying and said comparing, transmitting, to said remote program code at at least one of said plurality of remote terminals, data concerning one or more of said information sources which contain information relevant to said request so as to progressively tailor information retrieval results for at least one user and provide said information retrieval results to said at least one user.	Arrow from (4) to (1) on page 19 as transmission of data concerning one of information sources, containing information relevant to the request in the FIND button; Progressive tailoring is (5) - frequent use will make more refined. See also results displayed on page 21.

Claim 22	Exhibit A
An information retrieval system for accumulation and retrieval of data related to one or more information sources in a search space, said system comprising:	Page 19 - system overview; data is accumulated from the browser, and data is retrieved, with respect to one or more information sources INFO as contents on the internet (i.e., home pages (URLs)); search space is the internet. See page 21 listing retrieved URLs
remote program code at each of a plurality of remote terminals; said remote program code being adapted for monitoring user activity of a plurality of users, for collecting monitored data related to said user activity and to each of said information sources accessed by said at least one user, and for transmitting said monitored data; and	Page 14 and 18, "monitoring by software with browser built-in" is the remote program code adapted for monitoring at multiple terminals (terminals are also shown at (1) on page 19); page 22, "collection of knowledge" is collecting monitored data related to user activity; embedded into browser at page 19; transmitted to central code by arrow after (2)
a central computer having central program code receiving said monitored data transmitted from said remote program code; said central program code being adapted for maintaining a central database of data records, for accessing information from said information sources, and for comparing said data records with said information from said information sources;	See Page 19; central program code and computer are all parts except (1) and (2); monitored data is received at (2) from the remote program code at browsers (1); central database is maintained based on information in "People/Statistics", "People" and "Human decision/Human actions"; information INFO from said information sources is URLs of internet web sites stored in HTML; comparing of data records occurs in FILTER
wherein said central program code supplements said data records in accordance with said monitored data to provide an augmented central database,	In addition to the above monitoring, voting results are passed to the central database, see "voting" of page 19; details of voting at page 26
said central computer identifying candidate response information from said information sources in response to a request for information from said at least one user, comparing contents of said augmented central database with said request and with said candidate response information, and transmitting, to said remote program code at at least one of said plurality of remote terminals, data concerning one or more of said information sources which contain information	Request for information is at field next to FIND button on page 21; candidate response information is list of a subset of the URLs stored in HTML database; that corresponds to the request - on page 19, this is displayed as the list of 5 links; information sources are the URLs on page 21, and are stored in the HTML database on page 19; Page 19 - voting results are compared with the list of URLs, and the request for information in the FIND button; this is done at FILTER;

relevant to said request so as to progressively tailor information retrieval results for at least one user and provide said information retrieval results to said at least one user.	Arrow from (4) to (1) on page 19 as transmission of data concerning one of information sources, containing information relevant to the request in the FIND button; Progressive tailoring is (5) - frequent use will make more refined. See also results displayed on page 21.

5. From a date prior to April 7, 2000 until April 10, 2000, I traveled from Japan to the United States and personally met with patent attorneys, including Mr. Frank L. Bernstein, at the Menlo Park, California office of Sughrue Mion, PLLC, where we discussed the necessary required information for filing the U.S. patent application. During those meetings, I orally requested for Sughrue Mion, PLLC to review my disclosures (including those in Exhibit A) and to start preparation of a draft provisional application. After these meetings, I returned to Japan.

6. During the time from April 10, 2000 until May 9, 2000, Sughrue Mion, PLLC engaged in the review of my invention disclosure and started the preparation of a draft application in the ordinary course of business.

7. From May 9, 2000 until May 15, 2000, I again traveled from Japan to the United States, and personally met with Sughrue Mion, PLLC in their Menlo Park, California office. At that time, we discussed the draft application that had been prepared by the patent attorneys in Sughrue Mion, PLLC. As a result of these discussions, the patent attorneys with whom I met in Sughrue Mion, PLLC requested additional explanation materials, which I prepared and provided to these patent attorneys between May 9 – May 15, 2000. These materials are attached as Exhibit

B as evidence of these meetings with the attorneys. For example, the first page of Exhibit B is directed to claiming, which is a result of the discussion with the attorneys.

8. From May 15, 2000 until the filing of the U.S. patent application on May 30, 2000, the attorneys of Sughrue Mion, PLLC continued to review and revise and prepare the draft application for my further review in the ordinary course of business. I reviewed the draft application and provided comments thereto in the ordinary course of business, and authorized the filing of the provisional application.

9. In the ordinary course of business and in due course, Sughrue Mion, PLLC filed the provisional application in the U.S. Patent Office and forwarded copies thereof to me on May 30, 2000. U.S. Application No. 09/544,772 was subsequently filed, properly claiming priority to the above-described provisional application. A copy of the letter from Sughrue Mion, PLLC reporting the filing of the provisional application is attached as Exhibit C.

10. In view of the foregoing, it is clear that I, the named inventor of the above-captioned application, invented the subject matter of the claims prior to the April 7, 2000 U.S. filing date of U.S. Patent No. 6,757,661.

11. In the above referenced U.S. patent application conceived by me well prior to April 7, 2000, diligence was exercised from at least just prior to April 7, 2000 to the constructive reduction to practice of the invention on May 30, 2000, by filing the U.S. Patent Application No. 60/208,394.

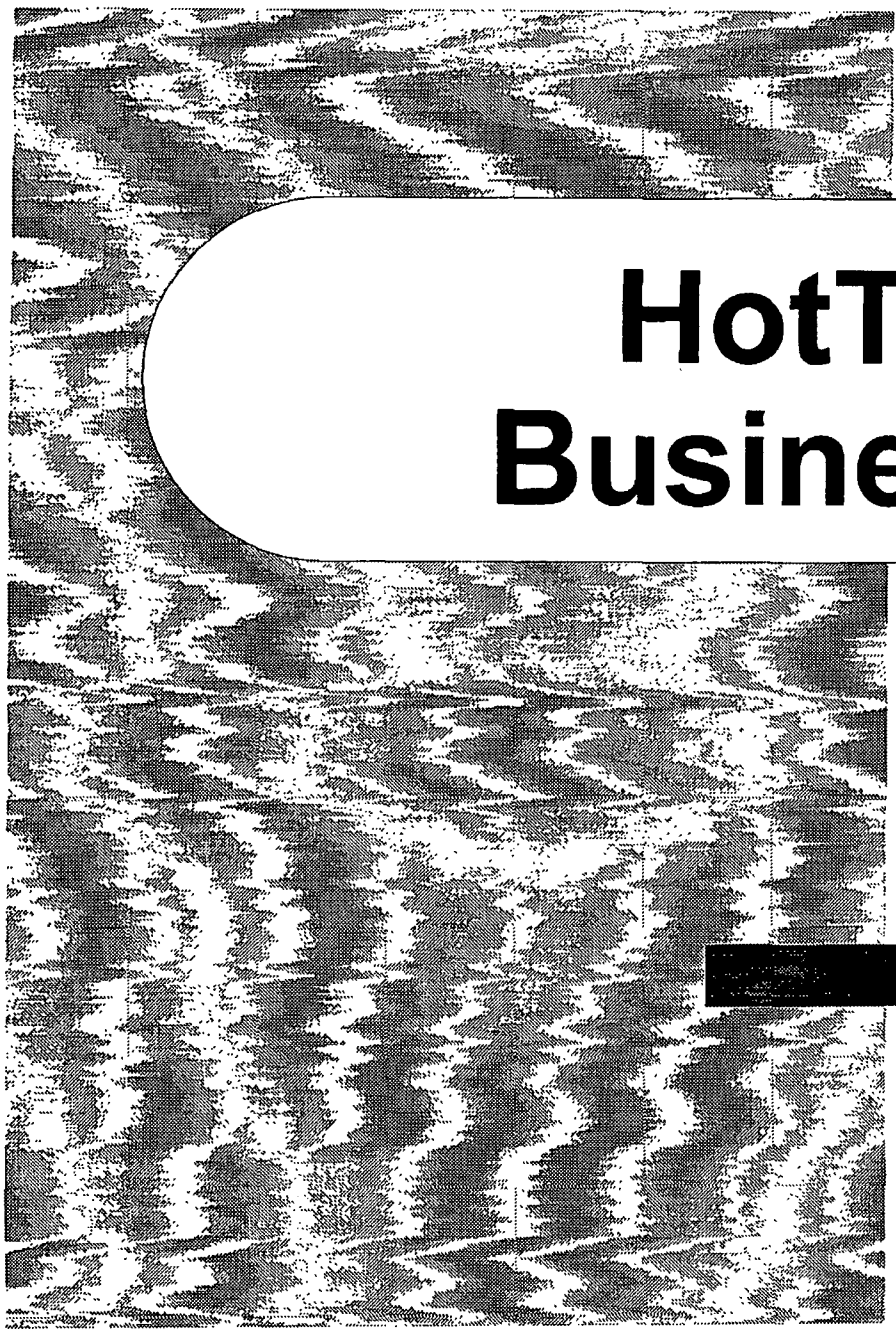
I hereby declare further that all statements made herein are of my own knowledge and are true and that all statements made on information and belief are believed to be true; and further

that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Secti on 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: Dec. 27, 2006

内山幸樹

Koki Uchiyama



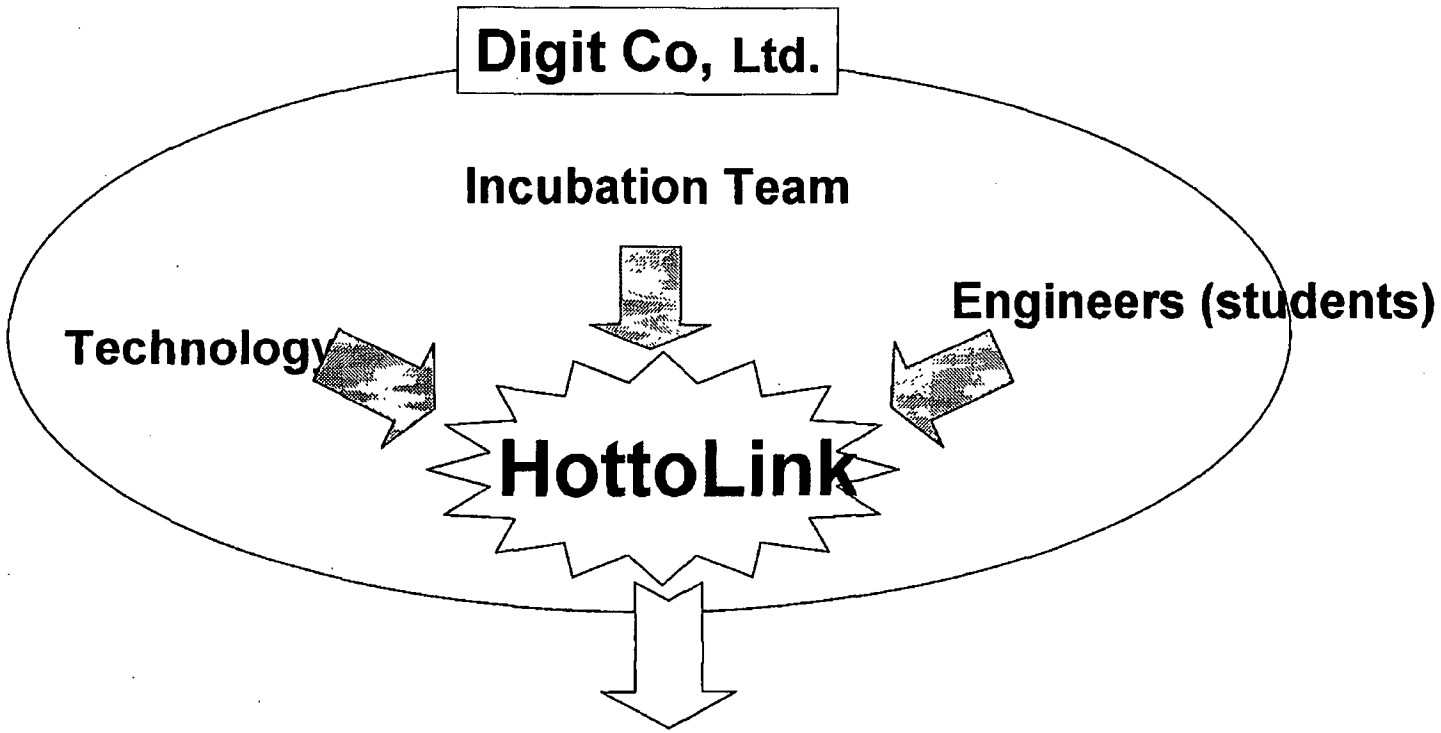
HotToLink Business Plan

Making the Internet more friendly

March 31, 2000

Digit Co, Ltd.

Idea Lab at Digit



Create Independent Business

HotToLink Management Team—5

- Name Satosi Matusawa
- Title/Position Development
- Bio
  - Graduate School, Tokyo University
    Research interests include network protocol

- Name 何 斌達
- Title/Position
- Bio
  - Graduate School, Tokyo University
    Research interests include parallel computer algorithm

HotToLink Management Team—1

- Name　Kouki Uchiyama
- Title　代表取締役社長
- **Bio**
  - 1992年4月 東京大学工学部船舶海洋工学科進学
  - アメリカズカップ日本代表艇設計チームに所属
  - 1994年3月 東京大学工学部船舶海洋工学科卒業
  - 1994年4月 東京大学工学系研究科船舶海洋工学専攻修士課程入学
  - 株式会社マジックマウス(現:デジット株式会社)立上に参加
  - 検索サッチー開発・プロデュース(IBM アプティバにバンドル、ローソンにて CD-ROM販売)
  - 学生技術者派遣センター(現:デジット派遣事業部)立上
  - 1996年4月 東京大学工学系研究科船舶海洋工学専攻博士課程進学
  - 1997年3月 東京大学工学系研究科船舶海洋工学科博士課程 中途退学
  - 1997年4月 株式会社マジックマウス(現:デジット株式会社)正式入社
  - 1998年5月 デジット株式会社常務取締役就任
  - 各種先端Web システム企画・開発 多数
  - ショッピングモール企画・開発 多数
  - 対話型インテリジェントインターフェースエージェントシステム開発
  - 1999年6月 エージェント研究会(現:ホットリンクプロジェクト)立上

HotToLink Management Team—2

- Name Tetsusi Takimoto
- Title/Position Financial strategies, Marketing, VP
- Bio

-東京大学法学部卒業

- 東京大学法学部助手就任
- マッキンゼー&カンパニー入社。デジタル業界系のVCのコンサルティングに従事

- Name Yuichi Hiraoka
- Position In charge of Development
- Bio

- 東京工業大学大学院総合理工学研究科物理情報工学専攻卒業。

- 株式会社富士通研究所にて、低ビットレート向け画像符号化方式、音声符号化方式の研究・開発に従事
- 現、大手コンピュータメーカ研究開発本部にて、画像処理研究に従事

HotToLink Management Team—3

- Name　　武田 隆
- Title/Position　　企画・デザイン担当、取締役
- Bio
  - 日本大学芸術学部文芸学科中退。
  - 現AVEC研究所代表。株式会社マジックマウスの設立に関わり、インターネットの創成期からホームページの企画・開発に携る。インターネット業界の草分け的存在。

- Name　池田誠
- Title/Position米国でのマーケティング・アライアンス戦略担当。取締役
- Bio
  - 会津大学教授。会津大学で教鞭をとる傍ら、様々なインターネット関連企業の顧問を務める。IPA 審査員。
  - 現在米国シリコンバレーに住居を構え、米国と日本を往復。

HotToLink Management Team—4

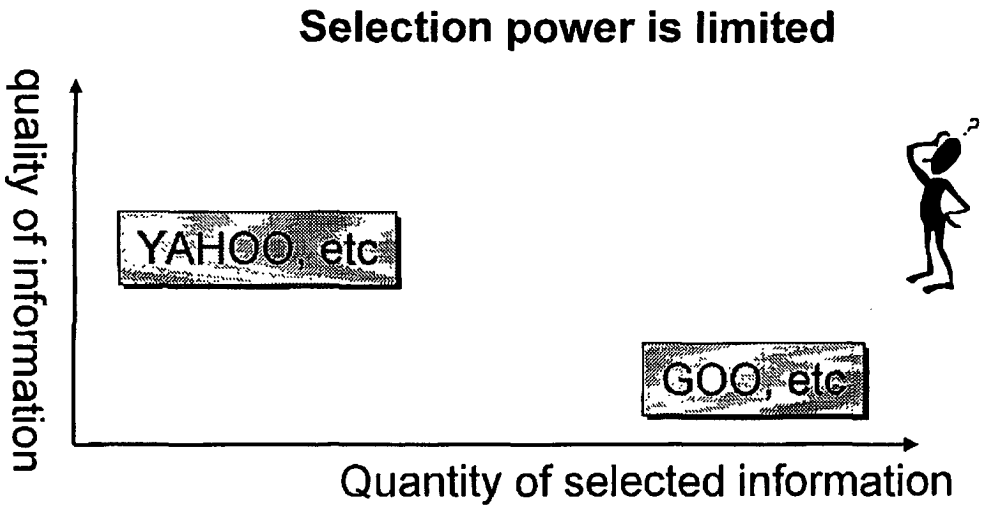
- Name　　Katumori Matushima
- Title/Position　　経営アドバイザー
- Bio
  - 現東京大学工学部教授。元日本IBM営業本部長。元プライスウォーターハウス常務取締役
  - デジットのインキュベーションチームの主要メンバー。デジット株式会社自体の経営コンサルティングも行う。

Objective: HotToLink will pursue

A friendly system that combines a user's knowledge and the power of computer to offer all the necessary information to the user

Internet Problems - 1:

Users' complaint: "can't get to the information I'm looking for"

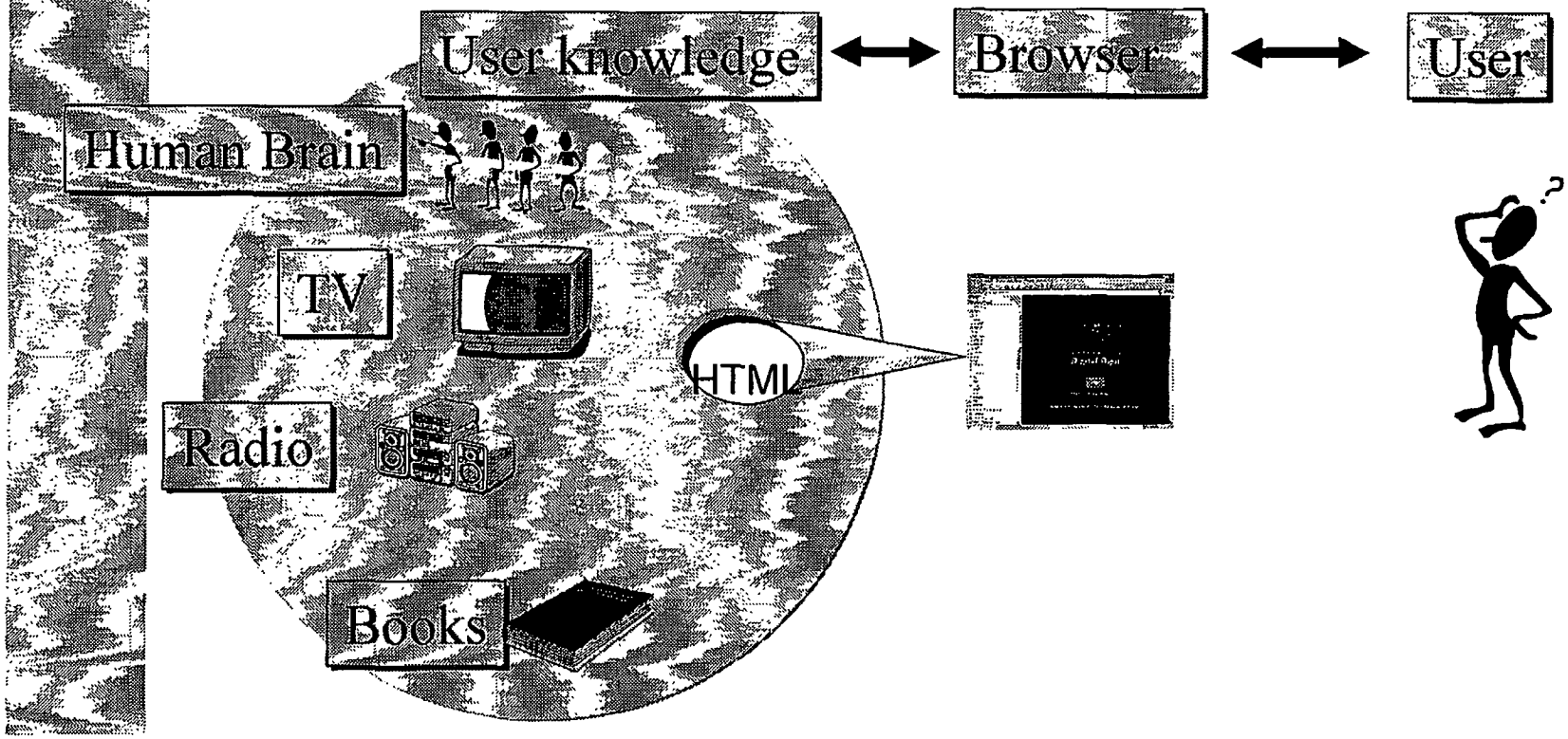


- Manual search: Quantity suffers
  - Directory type search engines, such as YAHOO
- Automatic search: Quality suffers
  - Robot type search engines, such as InfoSeek

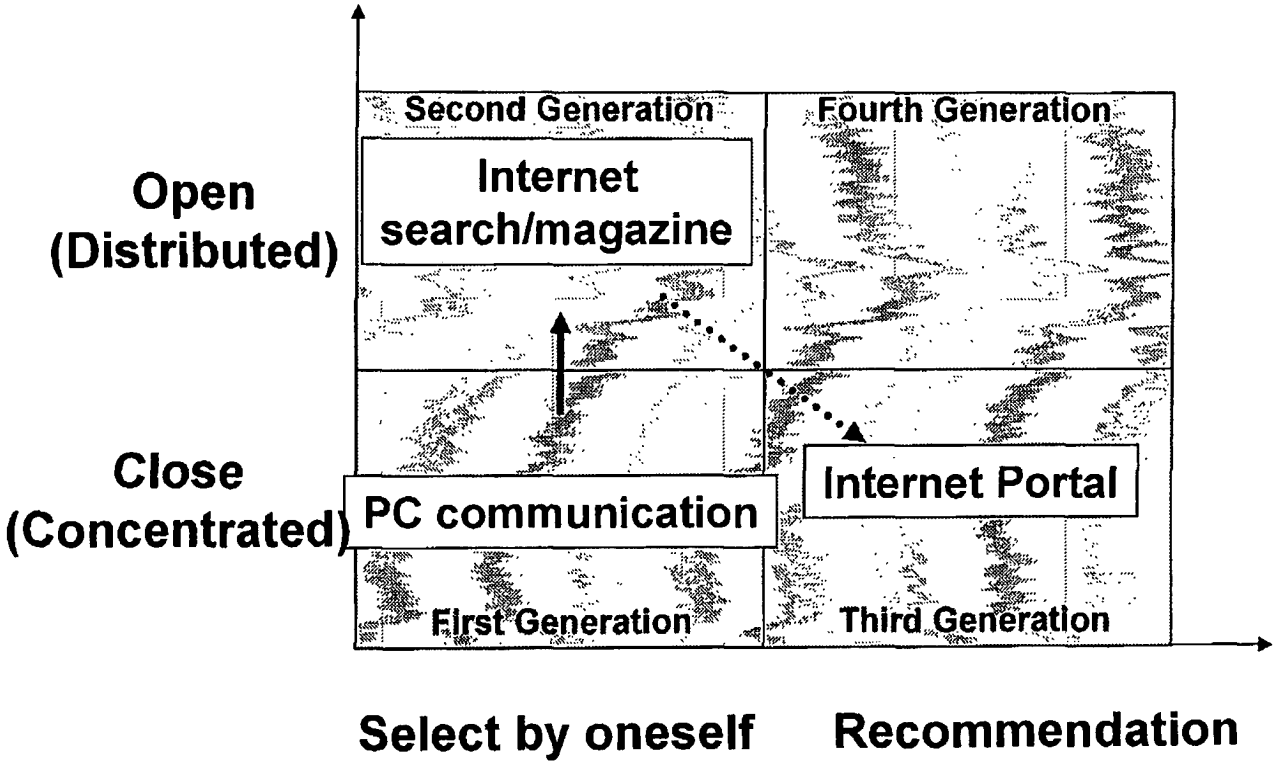
Internet Problems 2:

Users' complaint: "quicker to get the information from a friend"

The search is limited to HTML



Evolution of Contents Services (information search)

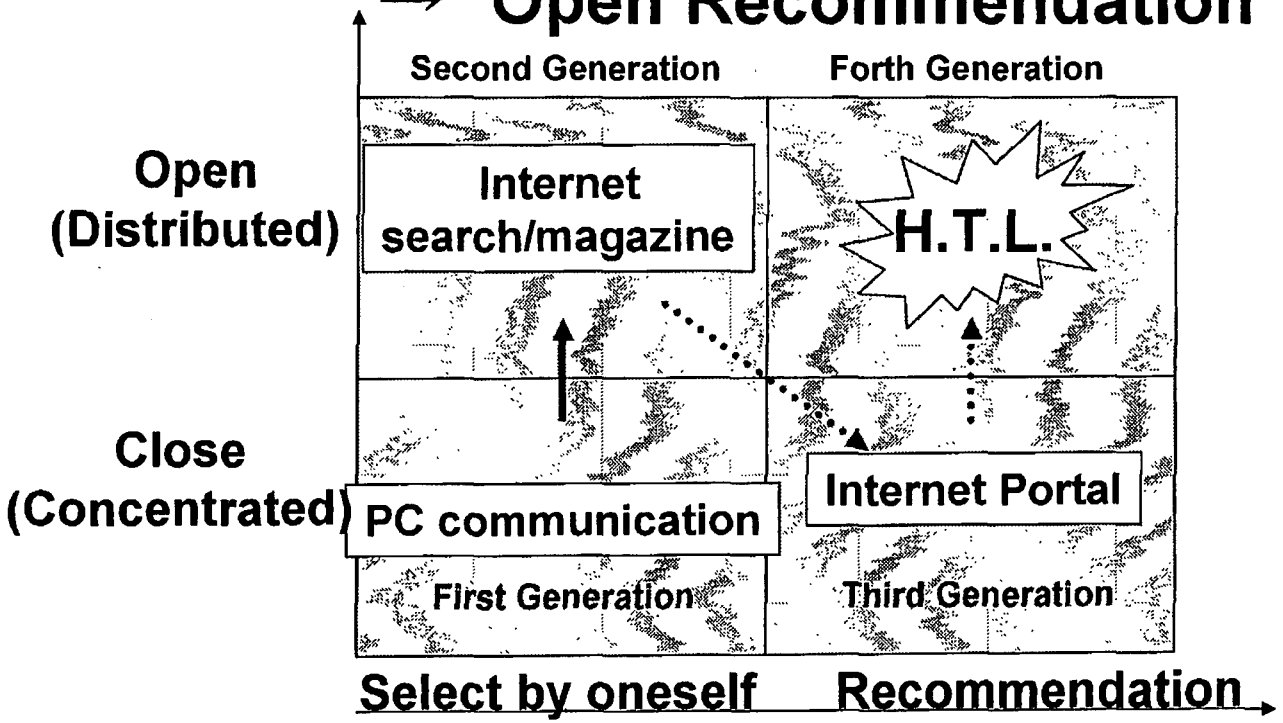


Problem with Portal

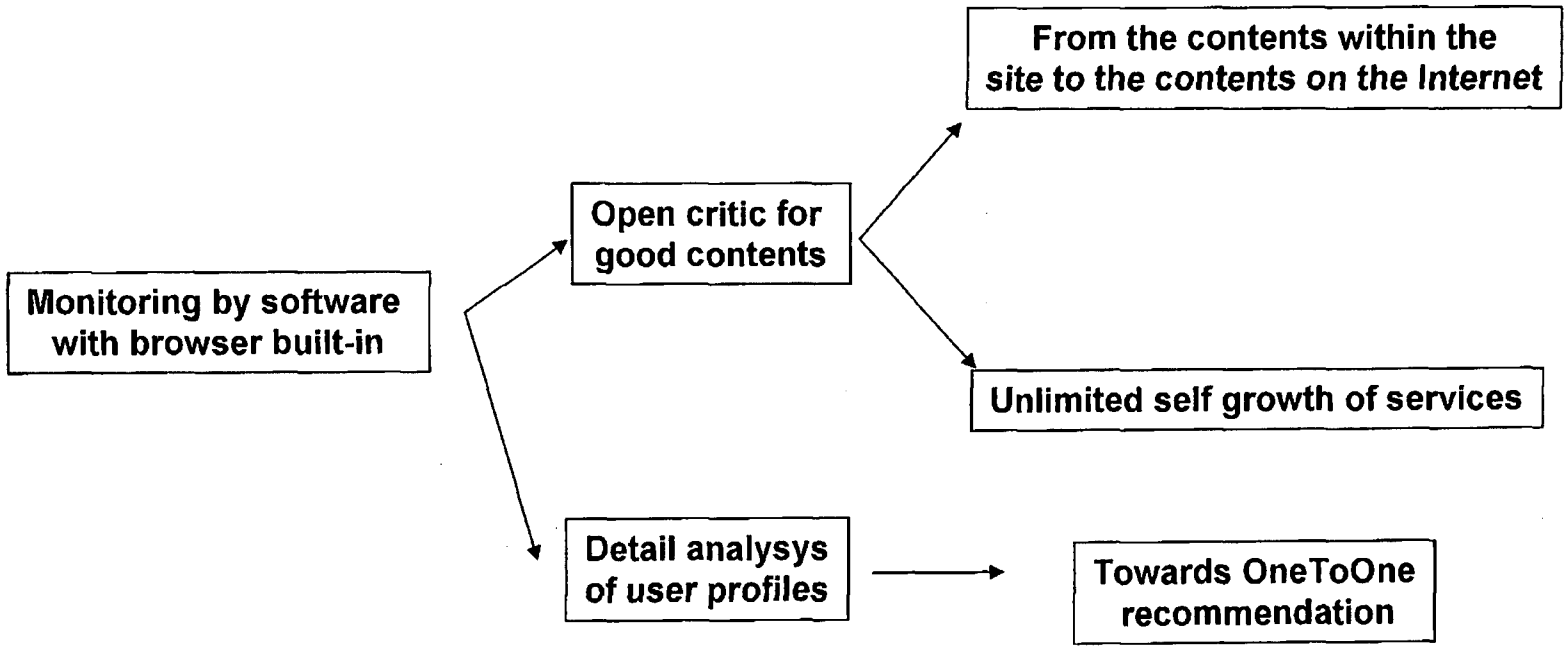
1. Contents are limited
2. Pre-selected recommendation -> for general public
3. Cost for acquiring contents are enormous
4. Always under pressure to update contents

Evolution of Contents Service (Information)

- Close Recommendation → Open Recommendation

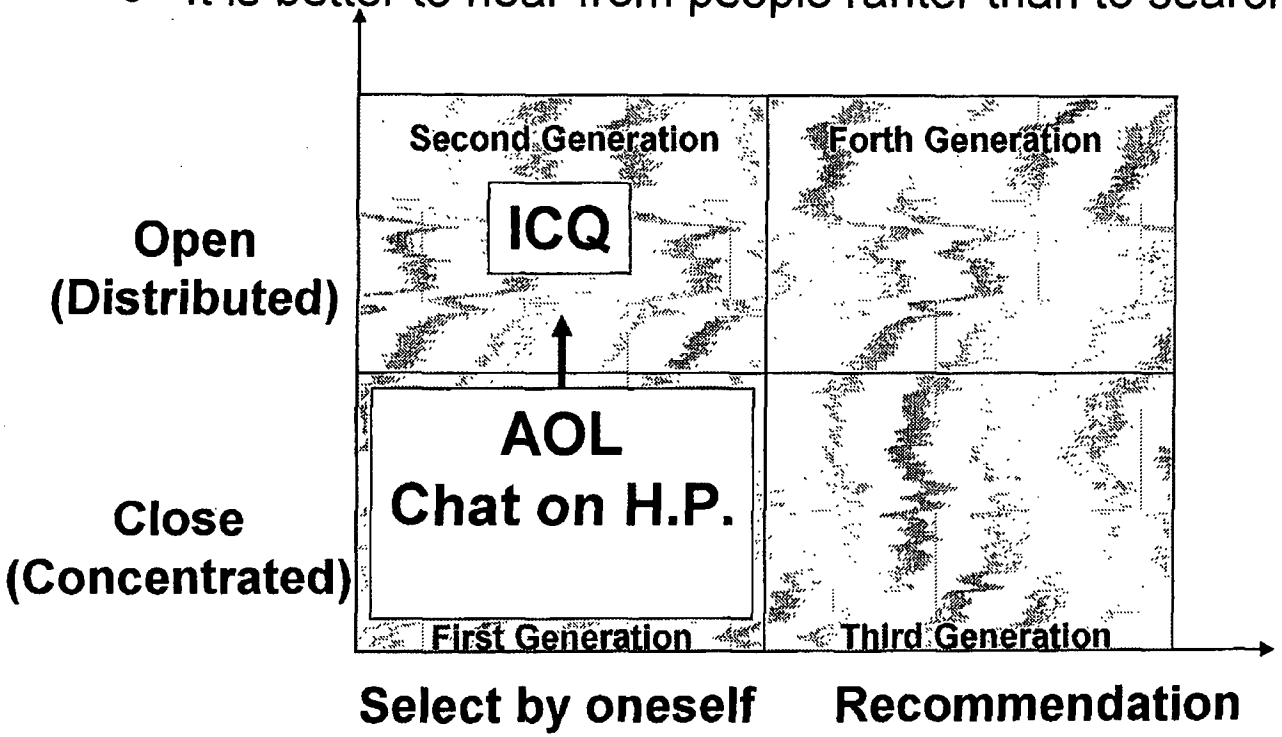


OpenRecomendationService = Unique feature of HotToLInk



Evolition of Contents Service 2 (Communication)

- It is better to hear from people rahter than to search Webs

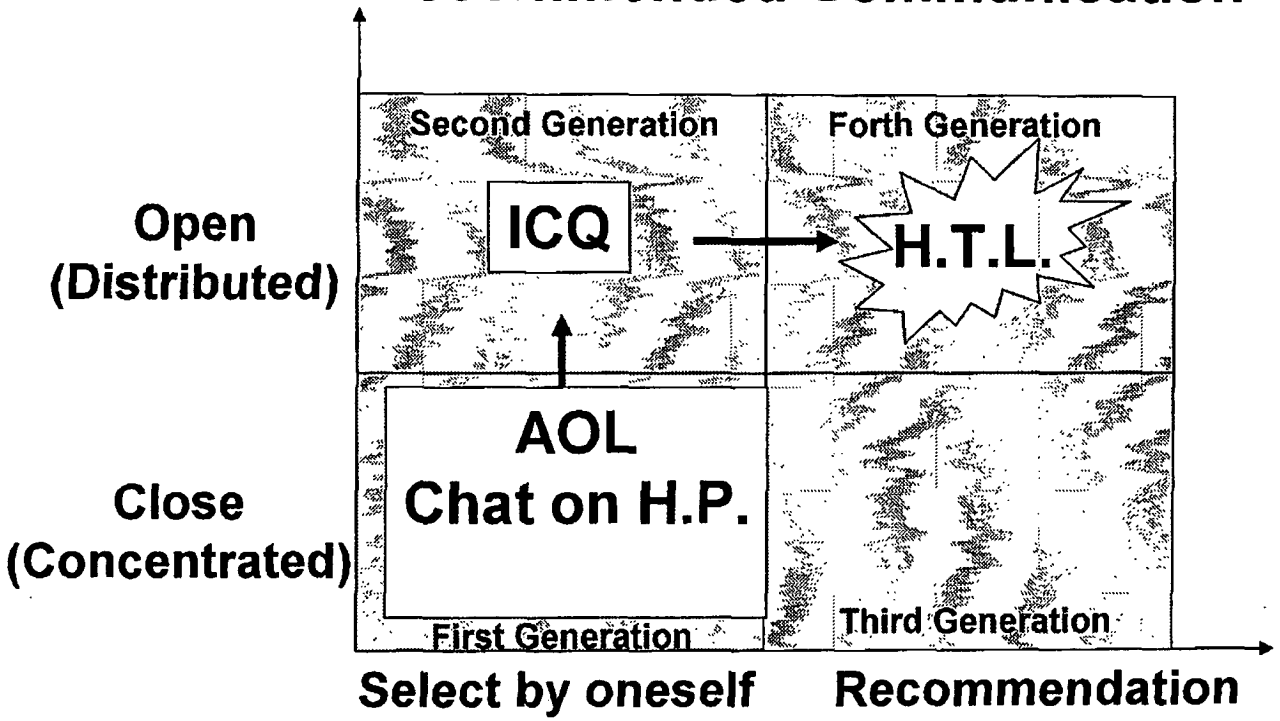


Problems of Communication Services

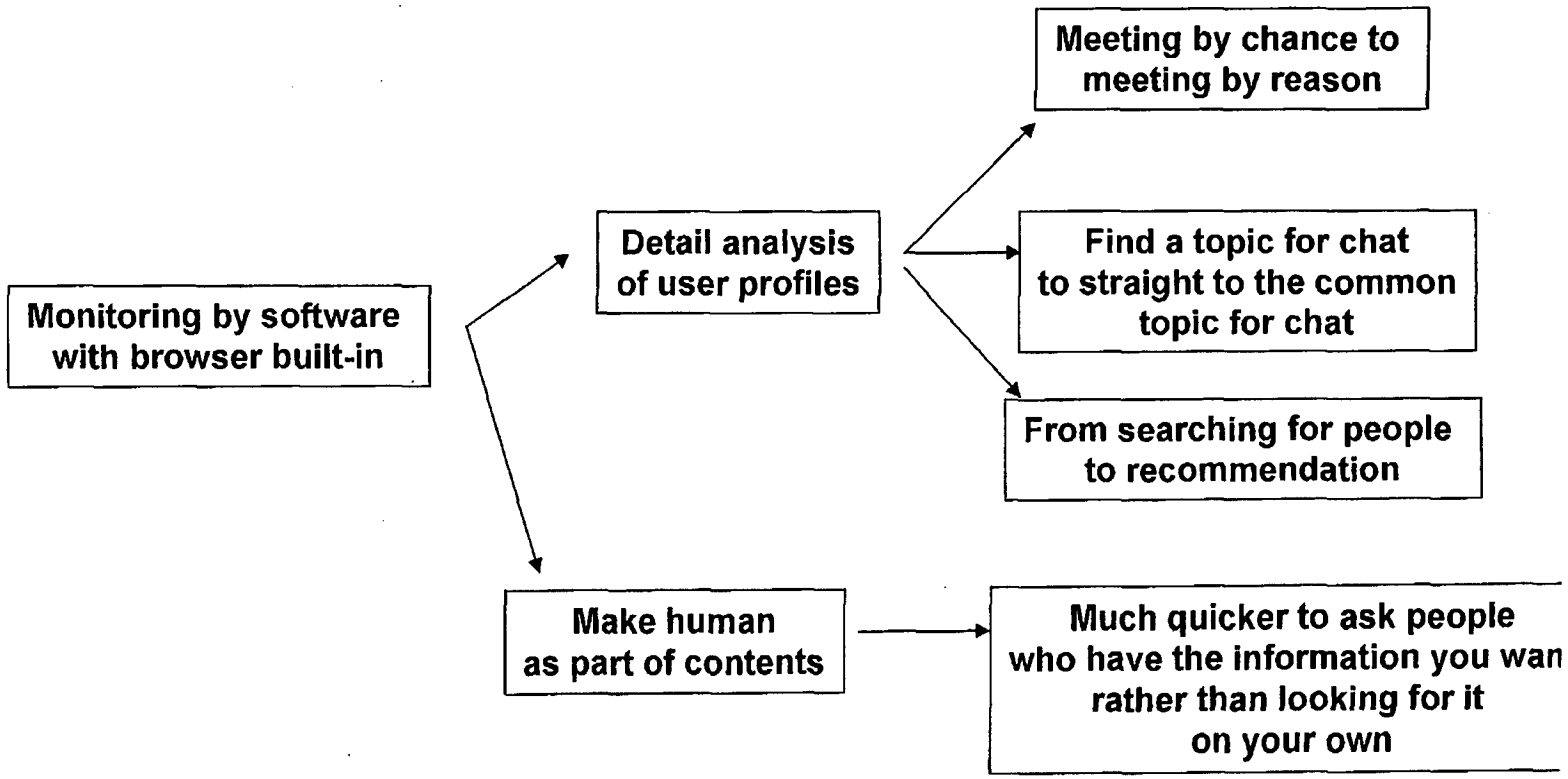
- Information Exchange
  - difficult to search a site with informaiton
  - difficult to evaluate the person with the information
- Meeting
  - difficult to find a subject for chat
  - difficult to find a person who is compatible to you.

Evolution of Contents Service 2 (Communication)

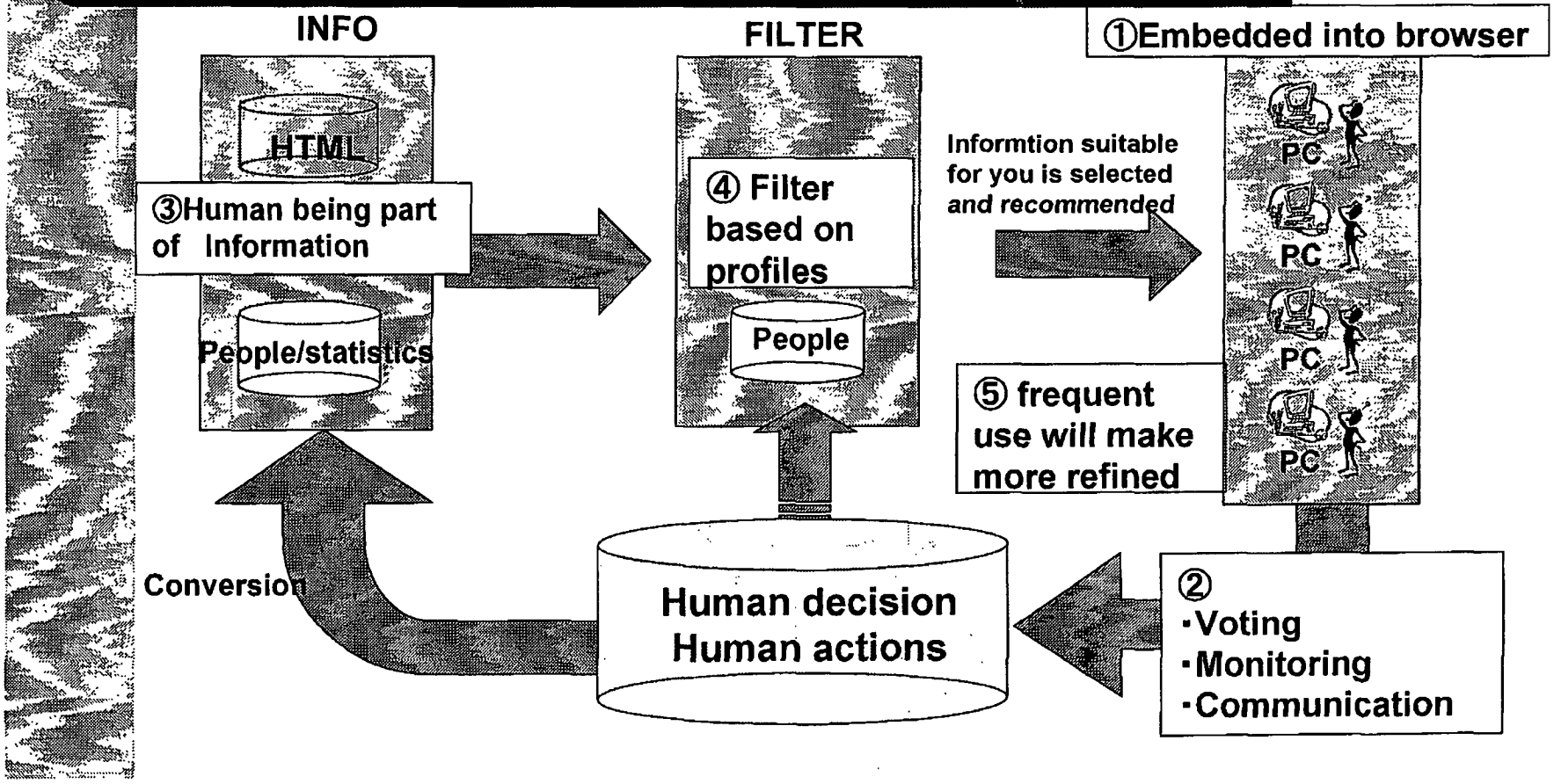
- Recommended Communication



Recommended Communication Service = Features of HotToLink

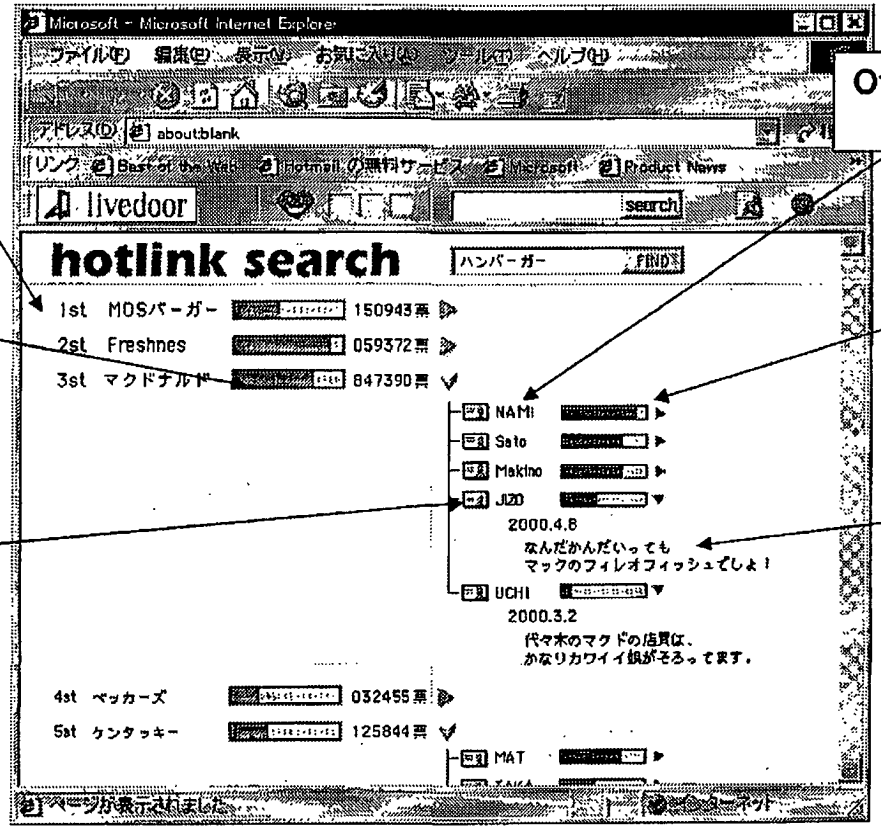


HotToLinkVer.1 System Overview



HotToLink Image Movie Demo

HotToLink Ver.1 Search & Search Results



Site List by ranking

The matching degree between you and the site

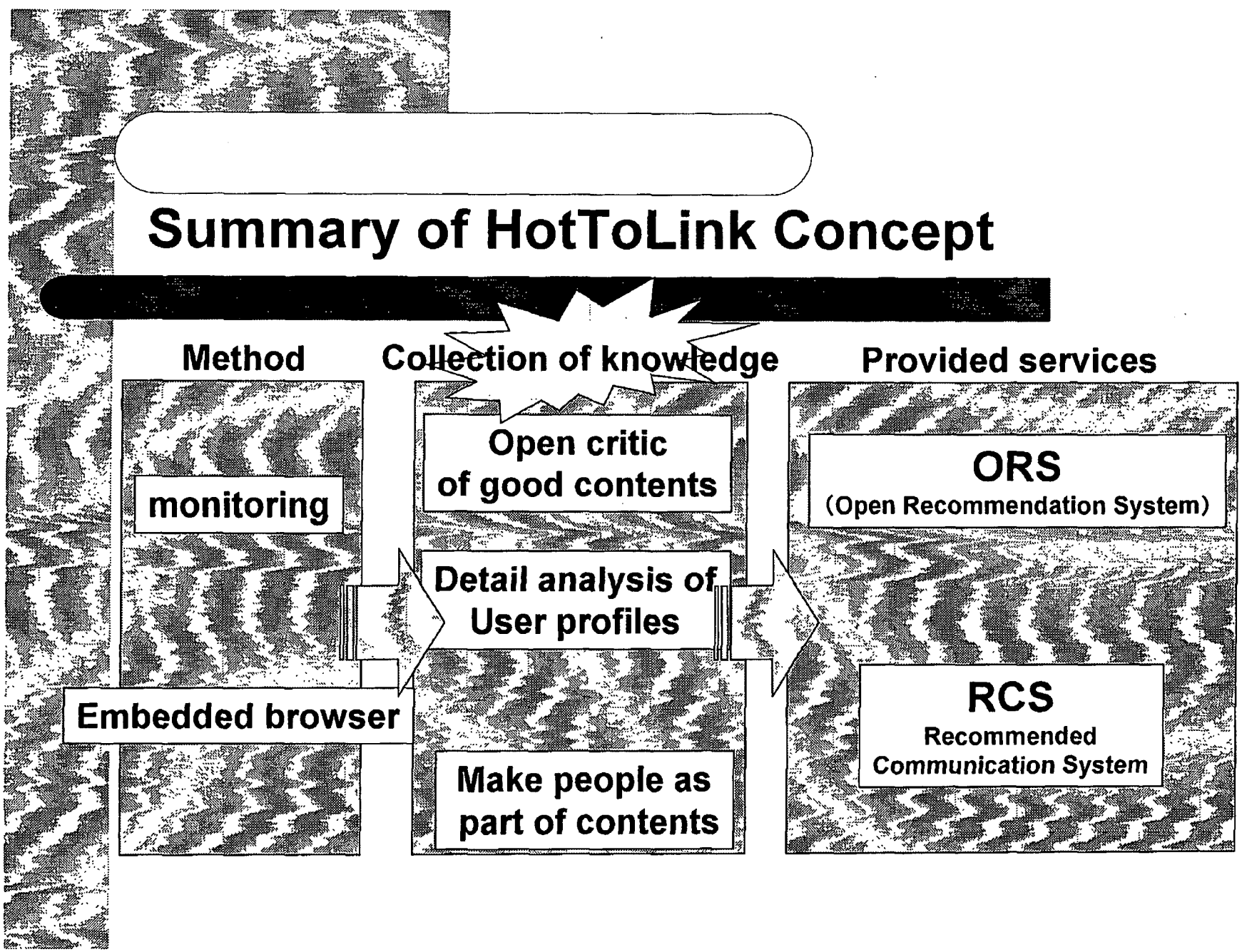
Show I-Card Button for other users who favor this site

Other users who favor this s

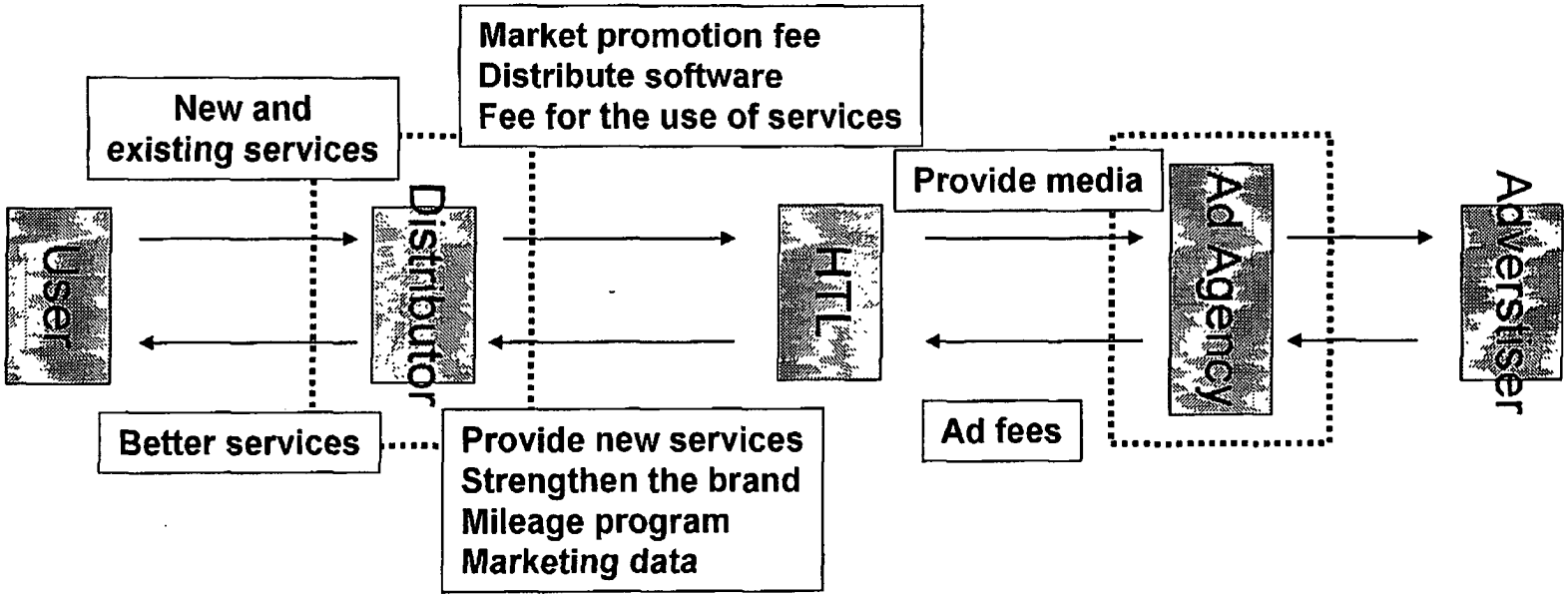
The matching degree between you and other users who favors this site

Comments from the users who favor this site

Summary of HotToLink Concept



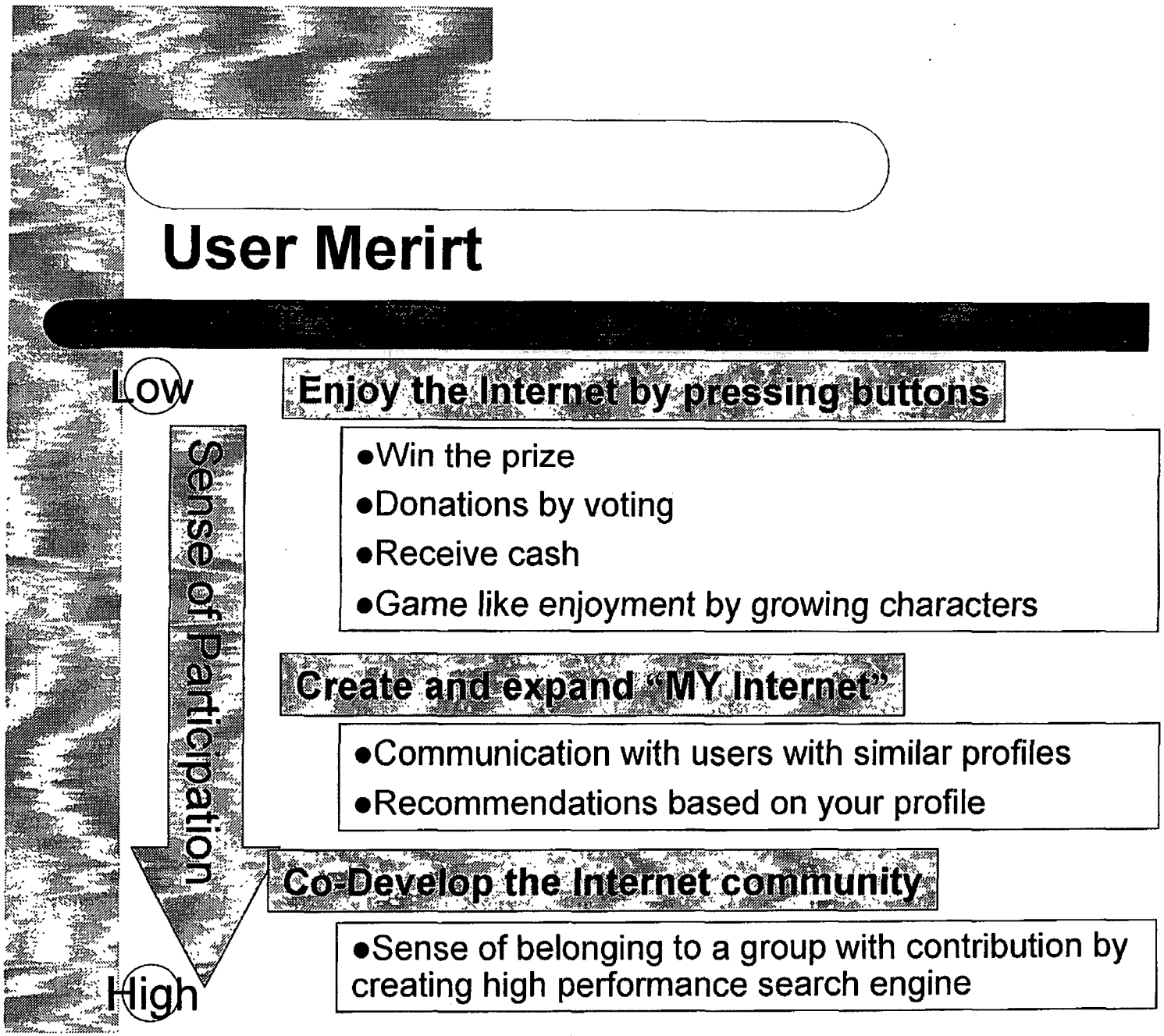
Business model idea



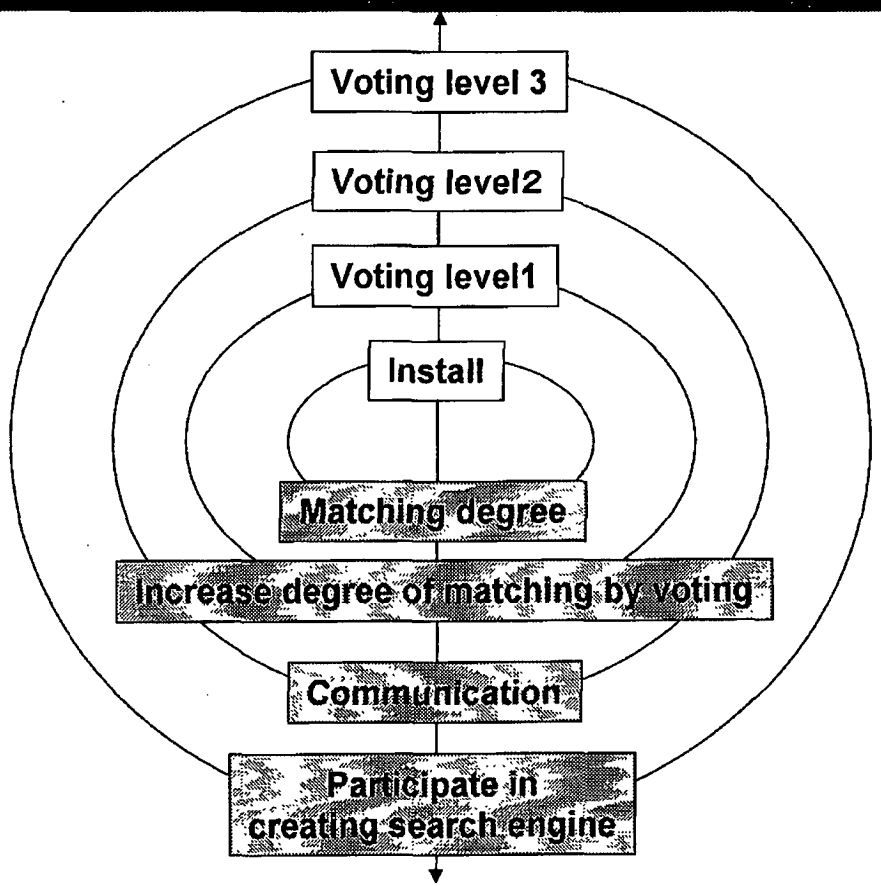
HotToLink Business

1. Clear user advantages
2. probability of building alliances for deployment
3. Clear business model and expect a return in a short period of time

User Merirt


Low
Sense of Participation
High
Enjoy the Internet by pressing buttons
•Win the prize
•Donations by voting
•Receive cash
•Game like enjoyment by growing characters
Create and expand "MY Internet"
•Communication with users with similar profiles
•Recommendations based on your profile
Co-Develop the Internet community
•Sense of belonging to a group with contribution by creating high performance search engine

User Merit


Voting level 3
Voting level2
Voting level1
Install
Matching degree
Increase degree of matching by voting
Communication
Participate in creating search engine

Distribution strategies

- Strategy 1: Alliance with ISPs

  Since this service addresses the needs and current problems facing ISPs, they are likely to support the distribution.

- Strategy 2 : Distribution as value added services to other search engine, shopping mall sites, and other portal sites.

Distribution Strategy 1- Collaboration with ISPs

Needs and Current Status of ISPs

- ISP's Needs

  Differentiation in other areas than pricing

  - Add superior services
  - Establish the brand
  - Retain users with mileage services

- Current Status of ISPs

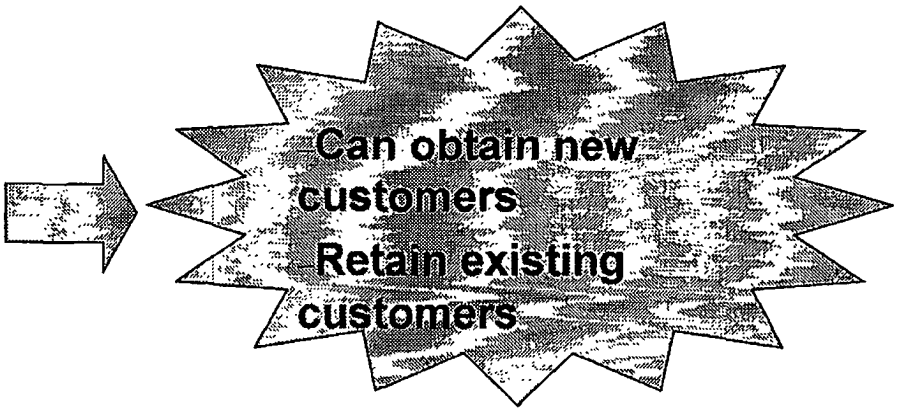
  Difficulties in creating the system

  - Have no resources for new services
  - Have no expertise in contents services

Distribution Strategy 1- Collaboration with ISPs

Compatible Needs between HotToLink & ISPs

- With HotToLink, ISP can
  - provide attactive services
  - to new and naïve users.
  - The more used, the better it gets. (hard to switch to other providers)



- ISP can easily adopt HotToLink
  - HotLink creates contents and mange it.
  - All ISP needs is to distribute plug-ins

Merits of Ad Agency and Advertiser

- More advanced and focused OneToOne banner
- Provide new advertising media

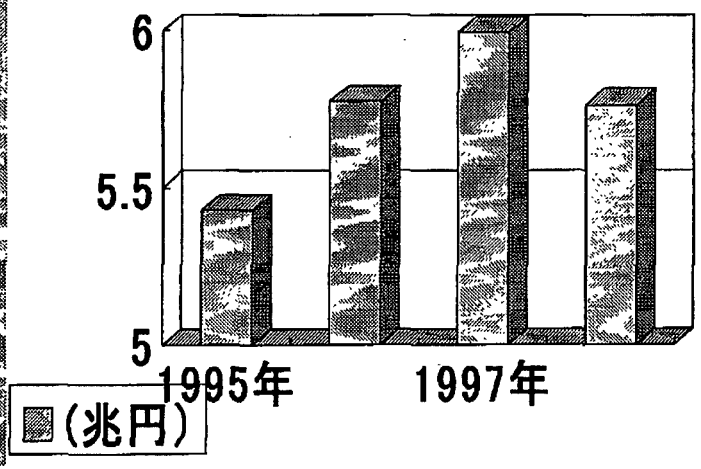
Profitability Analysis

- Marketability forecast
- Comparison with related services
- Strategies for competition
- Revenue forecast
  - # of users
  - Unit price
  - Revenue
- Profit planning
- Fund raising planning

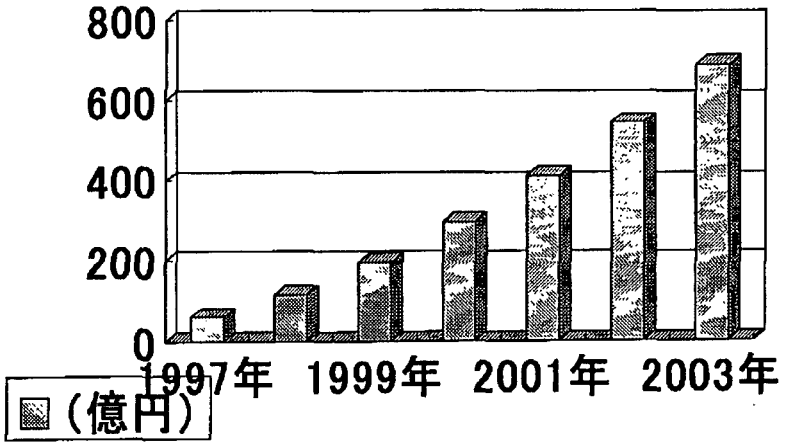
Market Forecast

- Advertisement budget on the Internet is expanding rapidly while the total expenditure on advertisement declines
- \70 billion market in 2003

•Domestic Ad. Fee



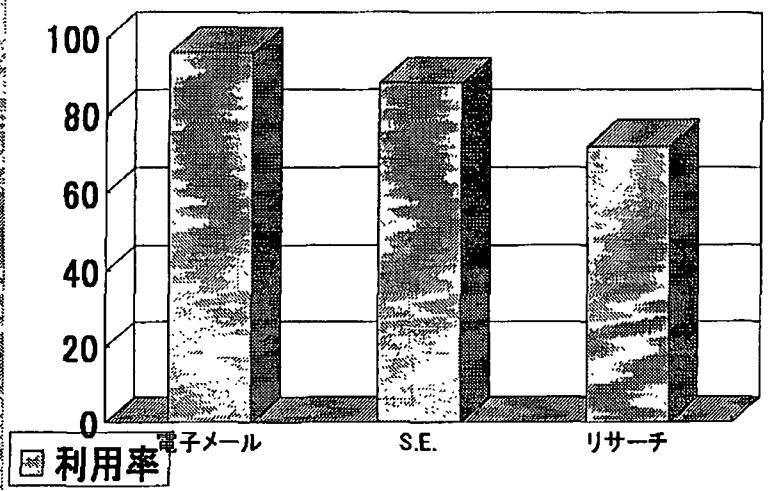
•Domestic Internet Ad. fee



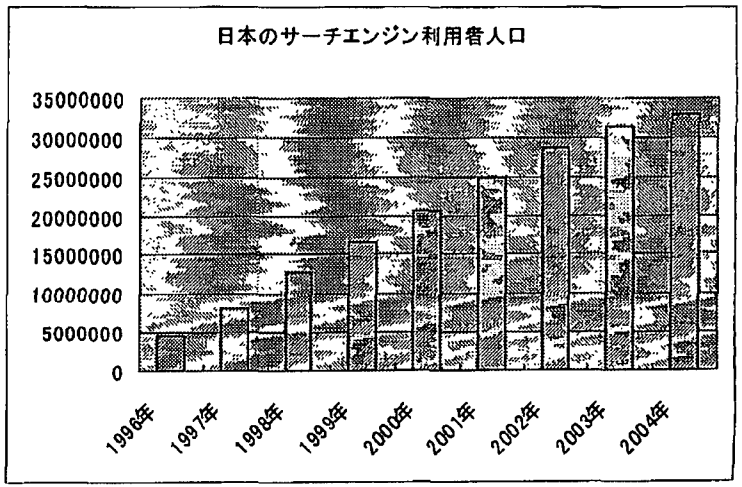
Forecast for the number of search engine users

- Forecast to have 3 million in 5 years
  - Establish 10% of the search engine market.
  - Establish 10% of the communication software market

•Internet user by use in percentage



•Domestic search engine use population forecast



Forecast on Unit Price and Frequencies of Ad Displays

- Assumption
  - the daily average number Web pages by the user of
  - this software is 20 pages.
  - a price for each display of a banner

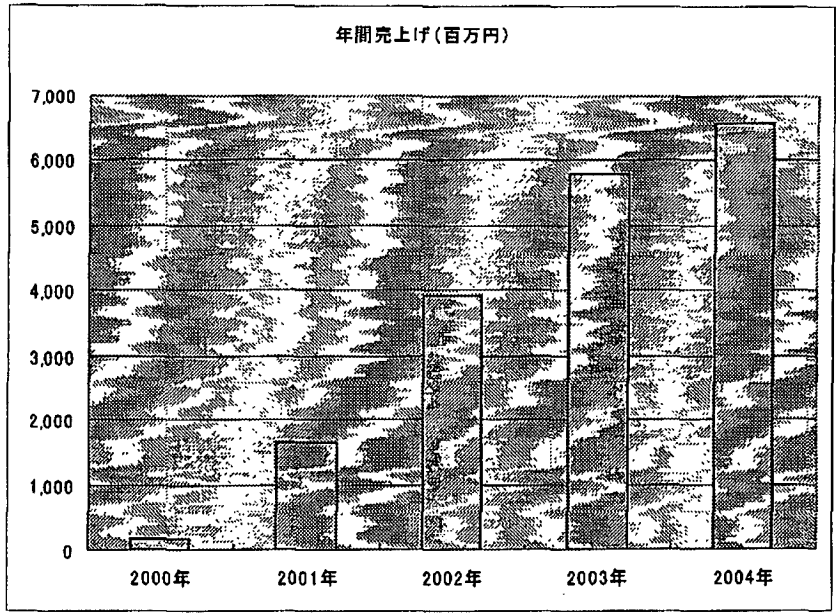
年	2000年	2001年	2002年	2003年	2004年
円/PV	1.00	0.60	0.50	0.40	0.35

Revenue forecast (Banner only)

- \150M in the first year and \7B in 5 years

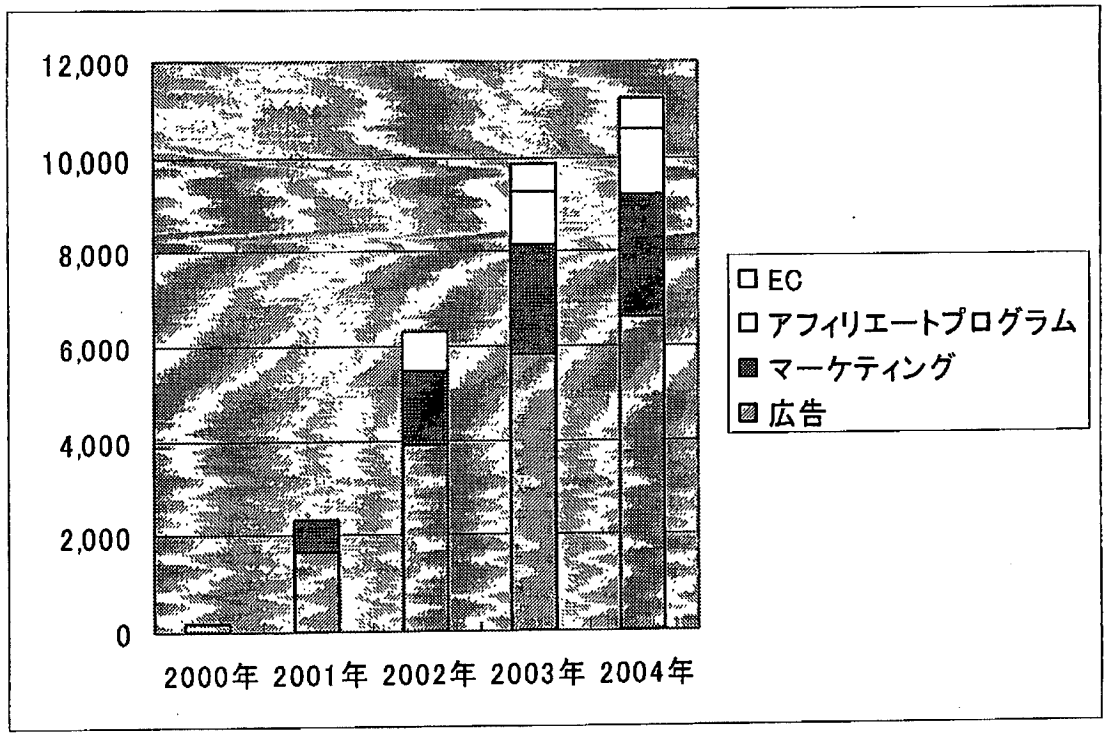
Banner revenue formula

- daily average number of HP × 365 × # of the users of this software × banner unit price



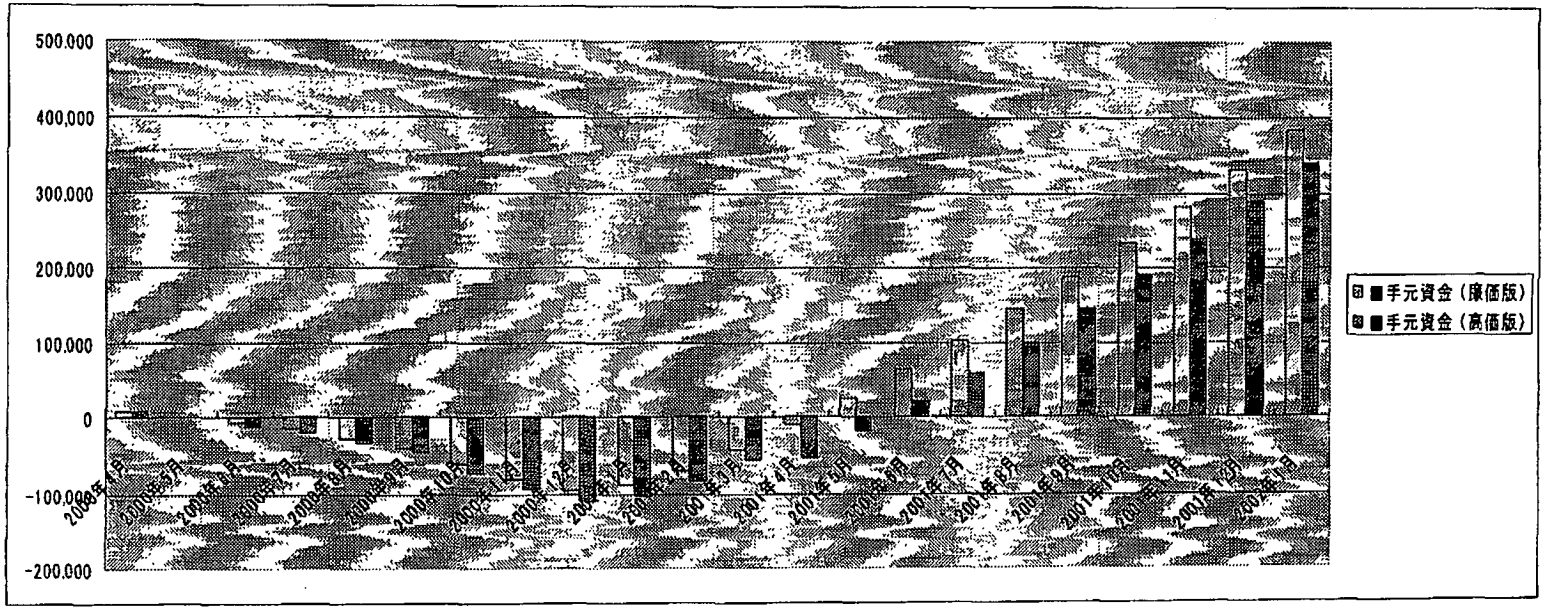
Revenue Forecast(Total)

- Set the target at 12B Yen in 5 years



Profit Plan

- Dissolution of accumulated losses by the end of the first fiscal year
- Net Income \8 billion in 2004



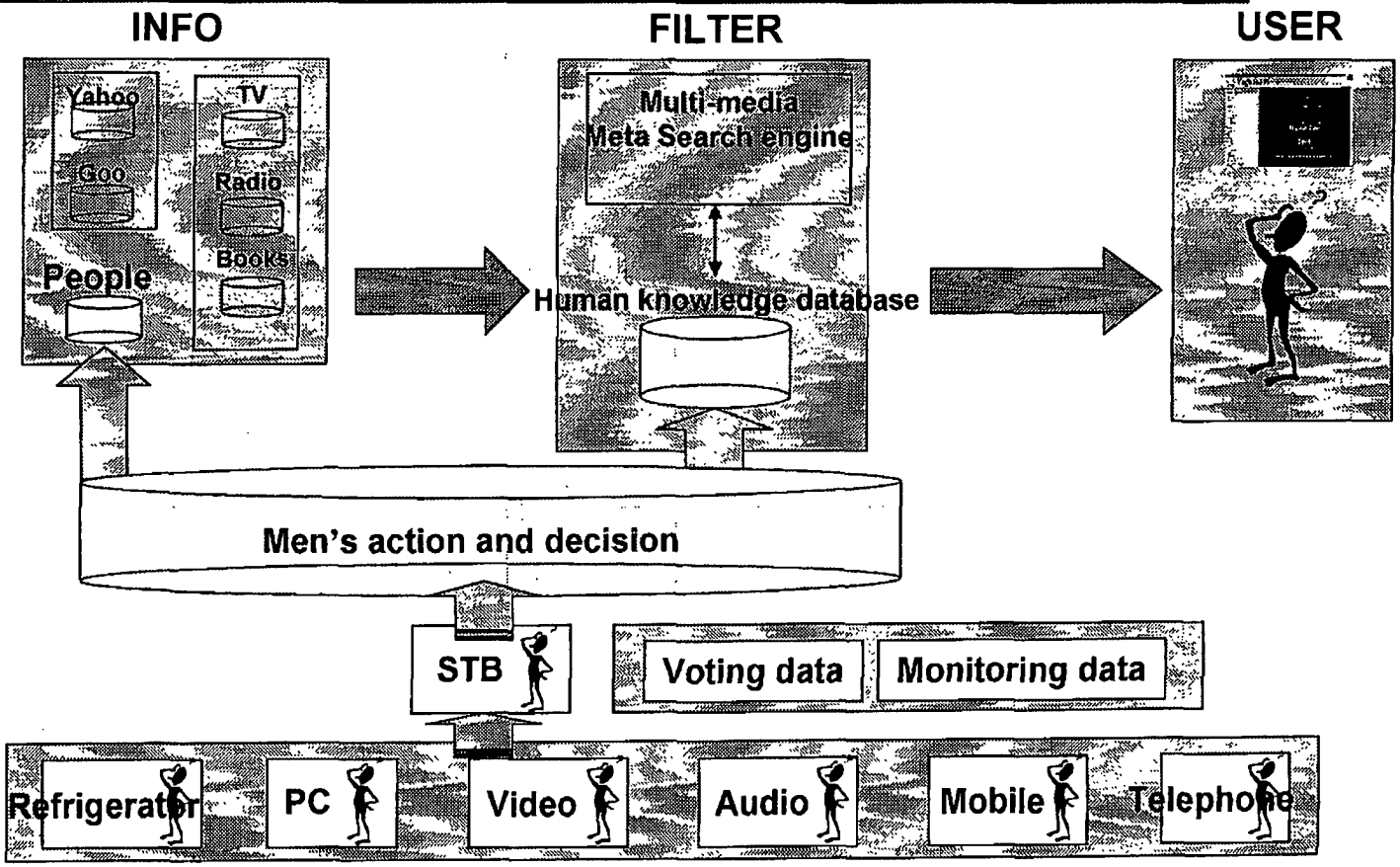
The Short term Schedule

- May Finish planning、obtain business method patent、alliance negotiation、development
- June distribution of Beta version
- July Launch
- December Start Hot Search Service

Long term plan

- Improve the contents of services
  - Hot Search (information and human integrated, total information recommendation based search engine.)
- Expand the concept to terminals beyond PCs
- Expand into mobile terminals
  - Expand to digital home appliance
    - Monitoring software distribution on the set-top-box
- Expand into overseas
  - US, Korea, Hong Kong, China and Europe

HotToLinkVer.2 System Overview



HotToLink Ver.2 Search/search result display

1. Voting/monitoring area

① embedded into brwoser

② OneToOne always displayed banner

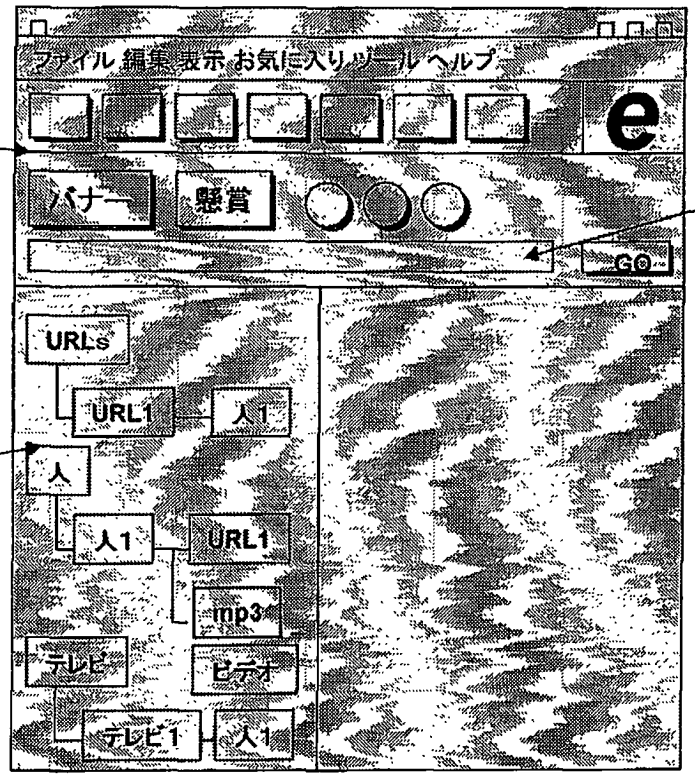
③ Speed lottery

2. Search area

- Part of browser

3. Search result display area

- high powered filtering and selection based on human actions and voting results
- Support for various media and display the multi facet results



Comparison with related services

- Evaluation of HotLink from the advertisement perspective
  - Few or no marketing cost because of the browser built-in system.
  - Expressive power due to graphics and animation is large
  - the browser built-in system does not require other components
  - All the users on the Internet use browsers, and the potential number of the users is large。

	Marketing cost	Expressiveness	Usability	# of users
HotLink	None	Large	Compact	Large
Banner Ad	Enormous	-	-	-
Mail Ad	-	Weak	-	-
Ad cooperative ISP	-	-	Bulky	-
Banner cooperative	-	-	-	Small

Strategies against competition

- Business Method patent pending
  - Open Recommendation services
  - Recommended communication services
- Technology patent pending
  - Browser built-in software
    - Browser embedded advertisement software
    - Browser embedded survey software
    - Browser embedded search engine software
- First in the market place
  - No competition yet in the market
  - High switching cost from this service
  - 規模の利益が利く

Before presenting a description for each claim, it may be useful to revisit the overall architecture of the system and how it works.

This method and the underlying technology allow

① To gather and collect all the information in regard to each user's actions and behaviors on Web sites at each client site rather than on a specific Web site.
② To aggregate and store all the collected data in a central database.
③ To exploit the data stored in the database to provide each user with "expert" as he uses the browser.

① Client side monitoring

Because the information is collected at each client rather that at server site, the collection can be done through out the Internet as opposed to each specific server site. The normal use information collection is done at each server location for that site specifically. Furthermore, the collected data are kept by the site owner and cannot be utilized (unless they make that data available for someone else for fee.)

② Aggregation

The data can be collected from multiple data sources; i.e.; multiple user browsers. All the collected data are aggregated and stored in a fashion for easy retreival.

③ Exploitation

The collected and stored data are used by selecting and filtering them for the user to retrieve useful information. The selection and filtering engine can be tailored so that this invention can be customized for particular market segments, and demographics.

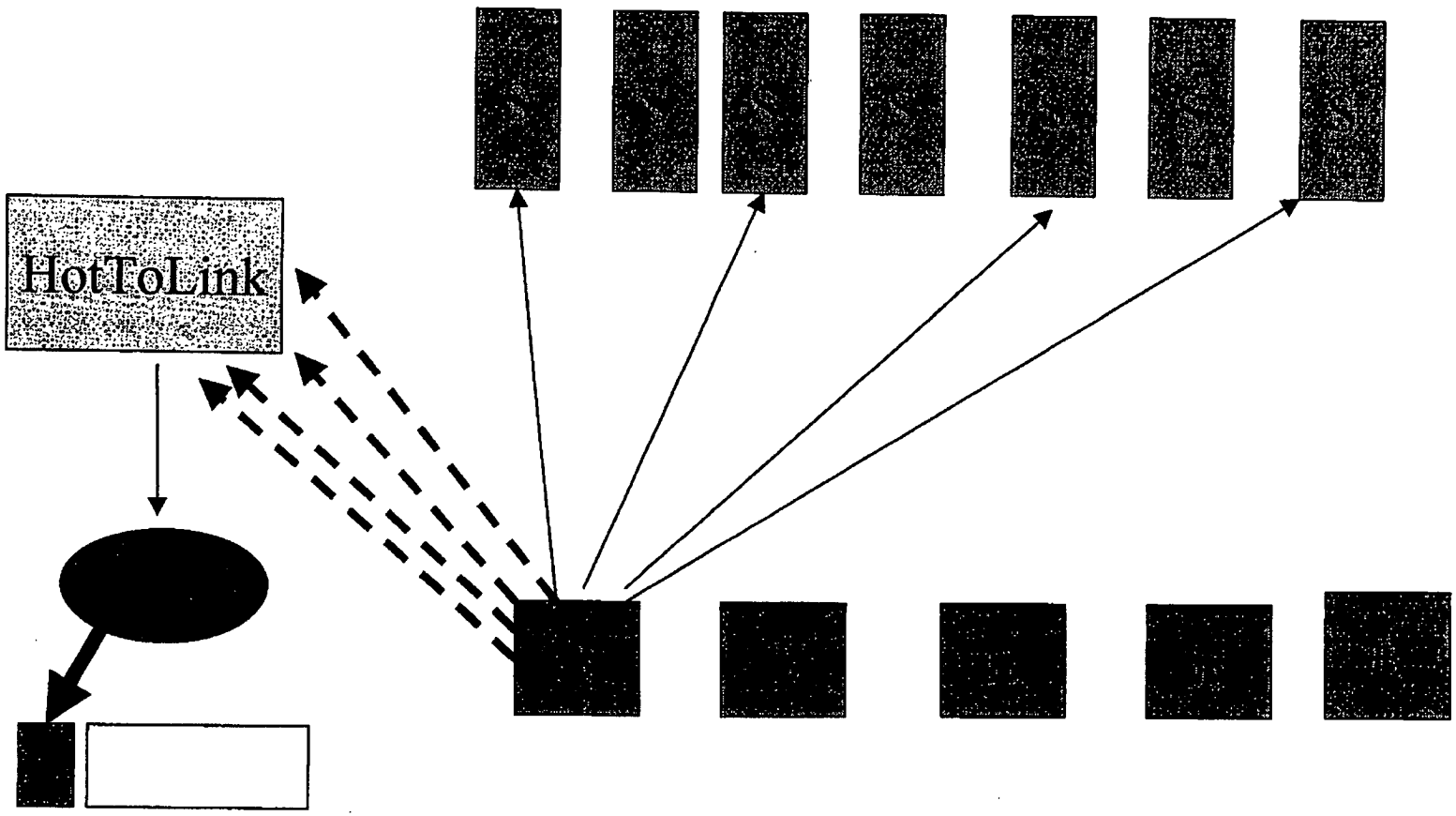
3 Basic Elements of the Invention

- Collection of data
- Aggregation of data
- Exploitation of data

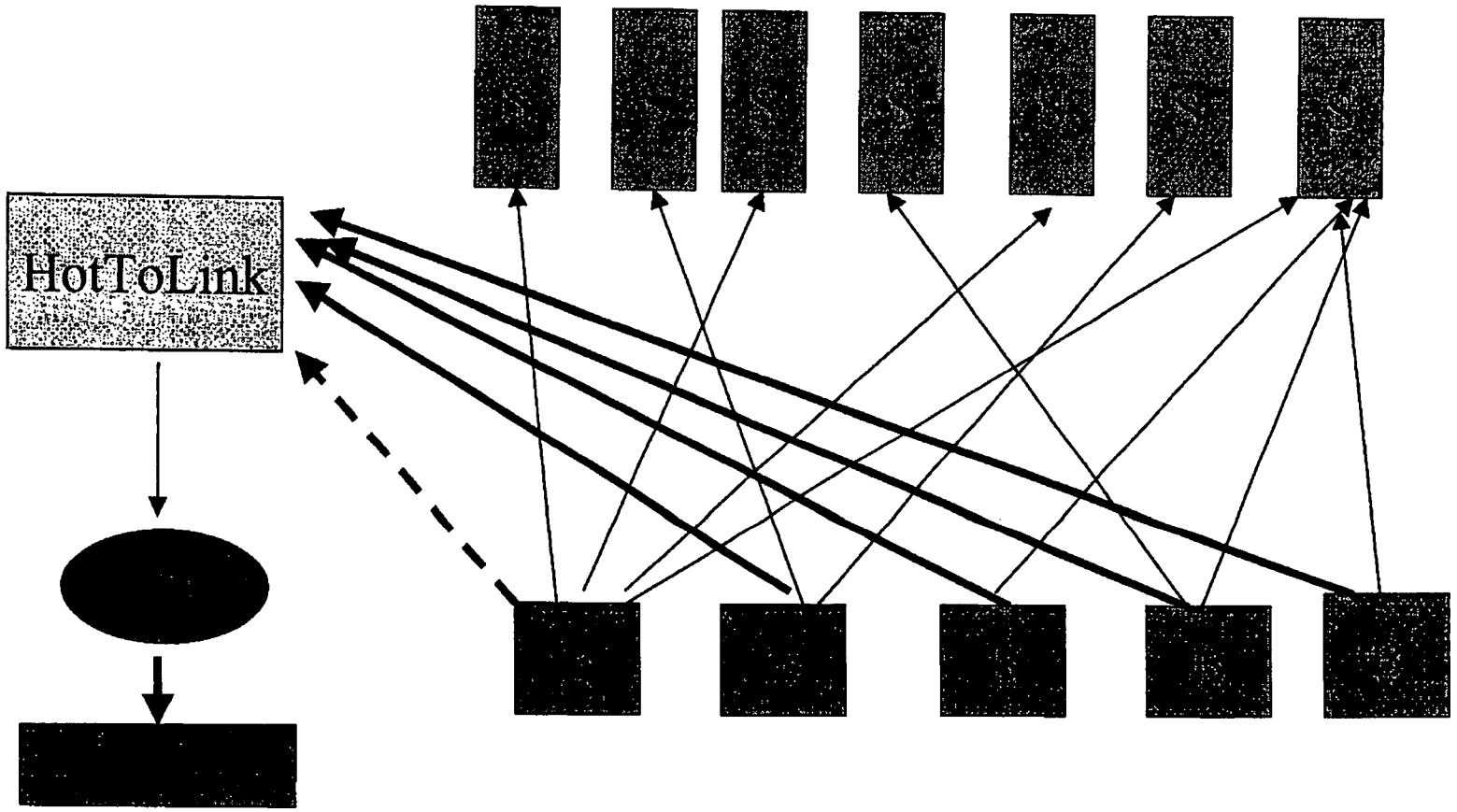
3 Elements

- Collect and gather use data, opinion data and other useful data explicitly by voting and implicitly from each browser.
- Aggregate data by combining collected data from multiple sources and deposit them in a central database.
- Exploit the stored for each user to use.

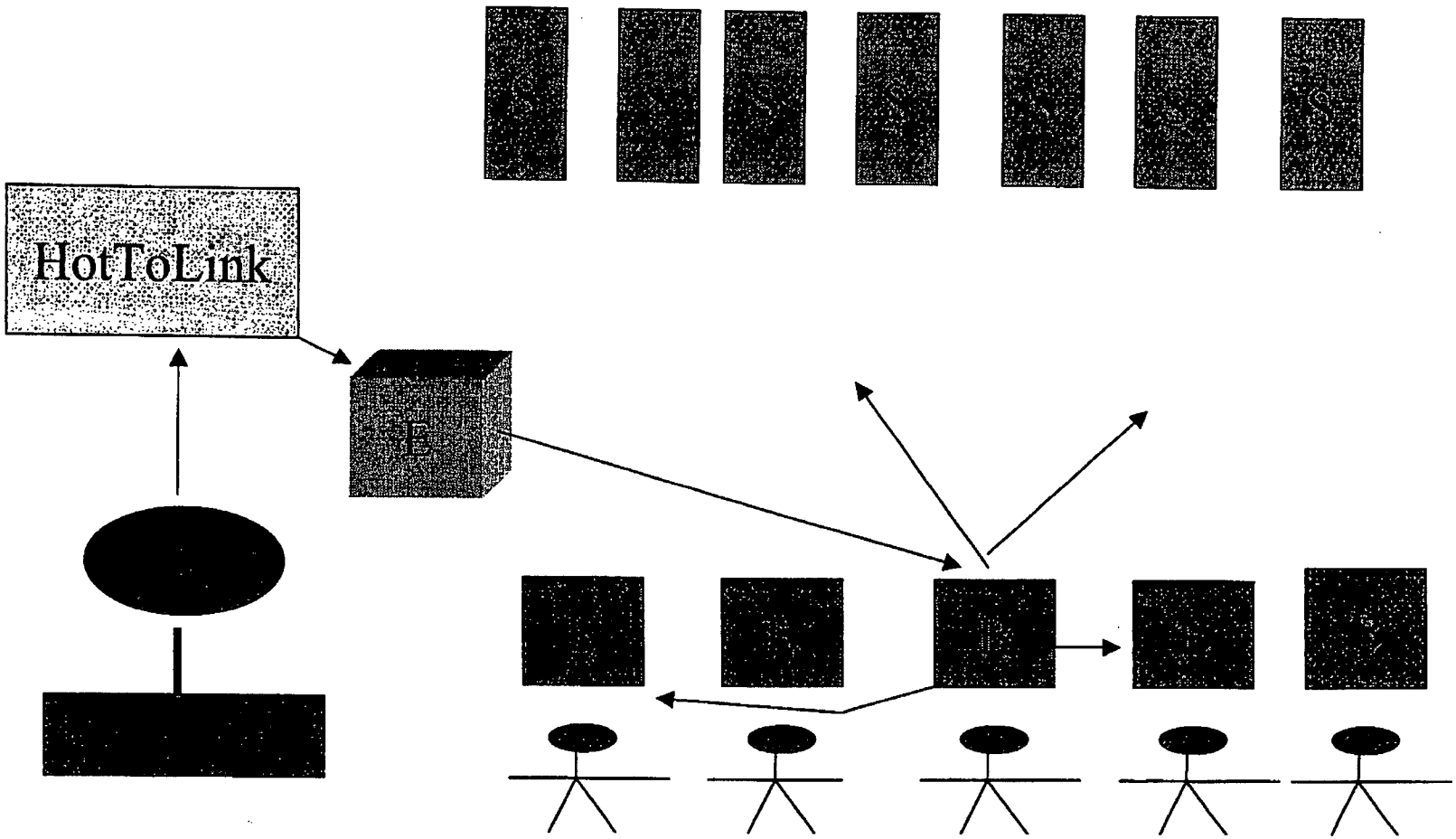
Collection



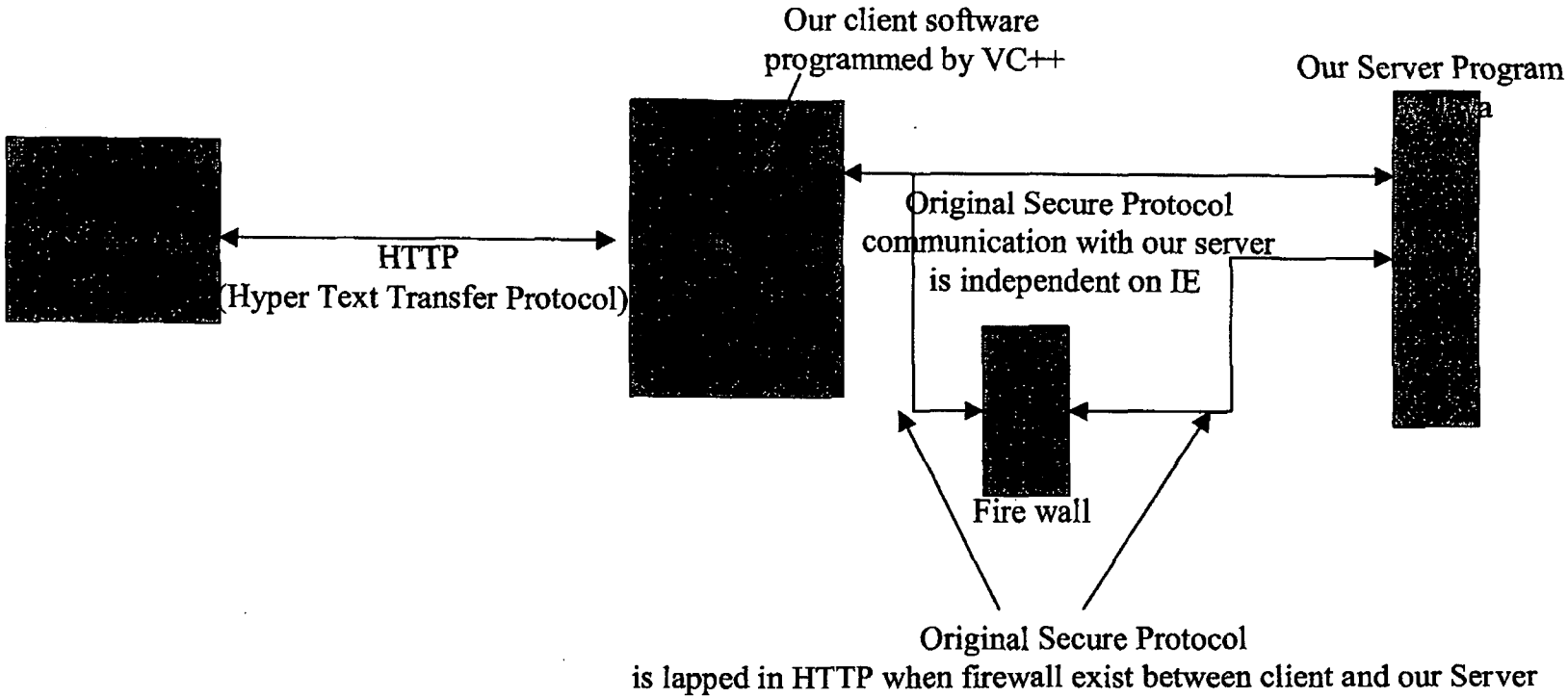
Aggregation



Exploitation of Collected Data

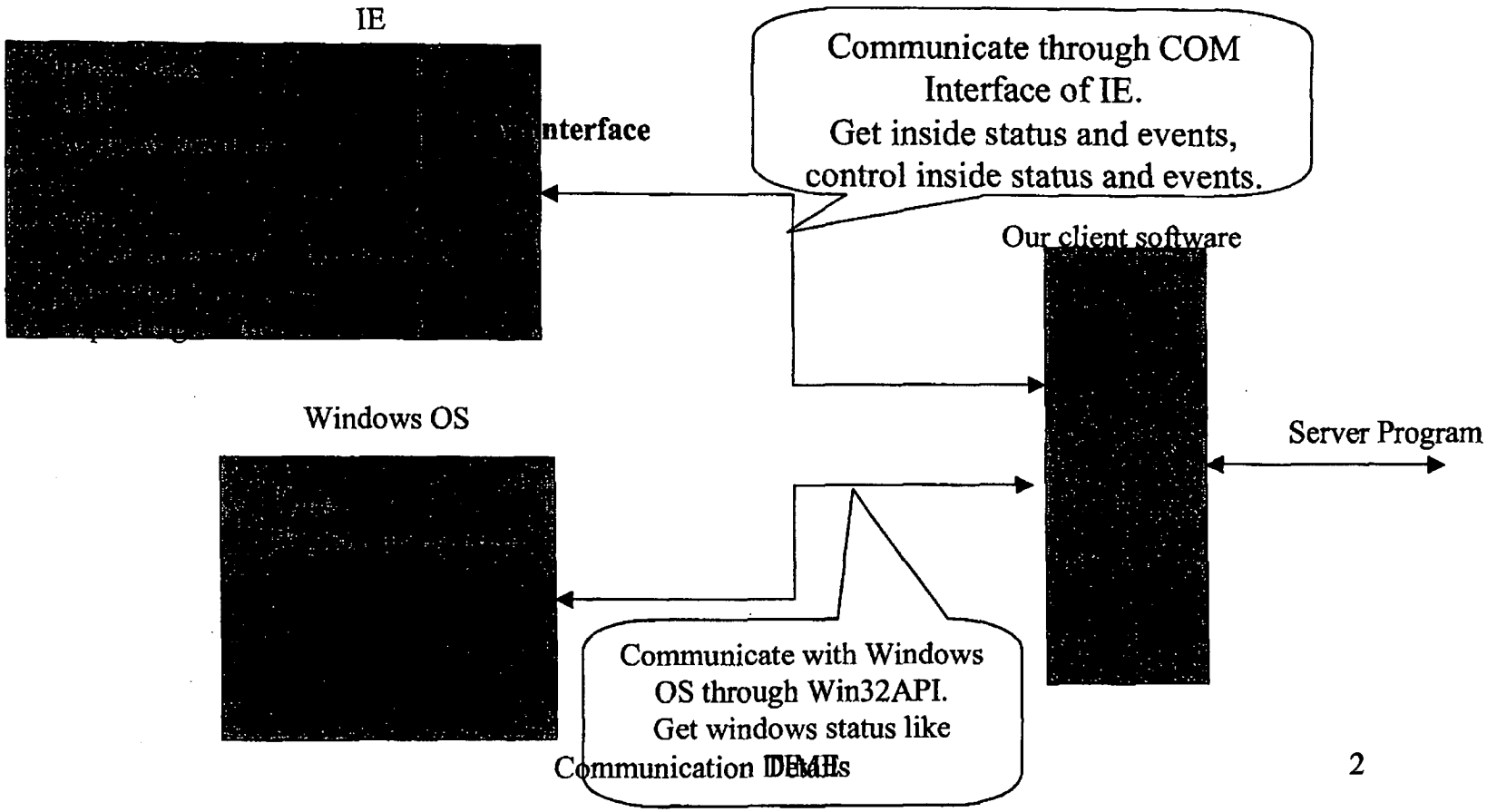


The way of Communication between our client software and our server program

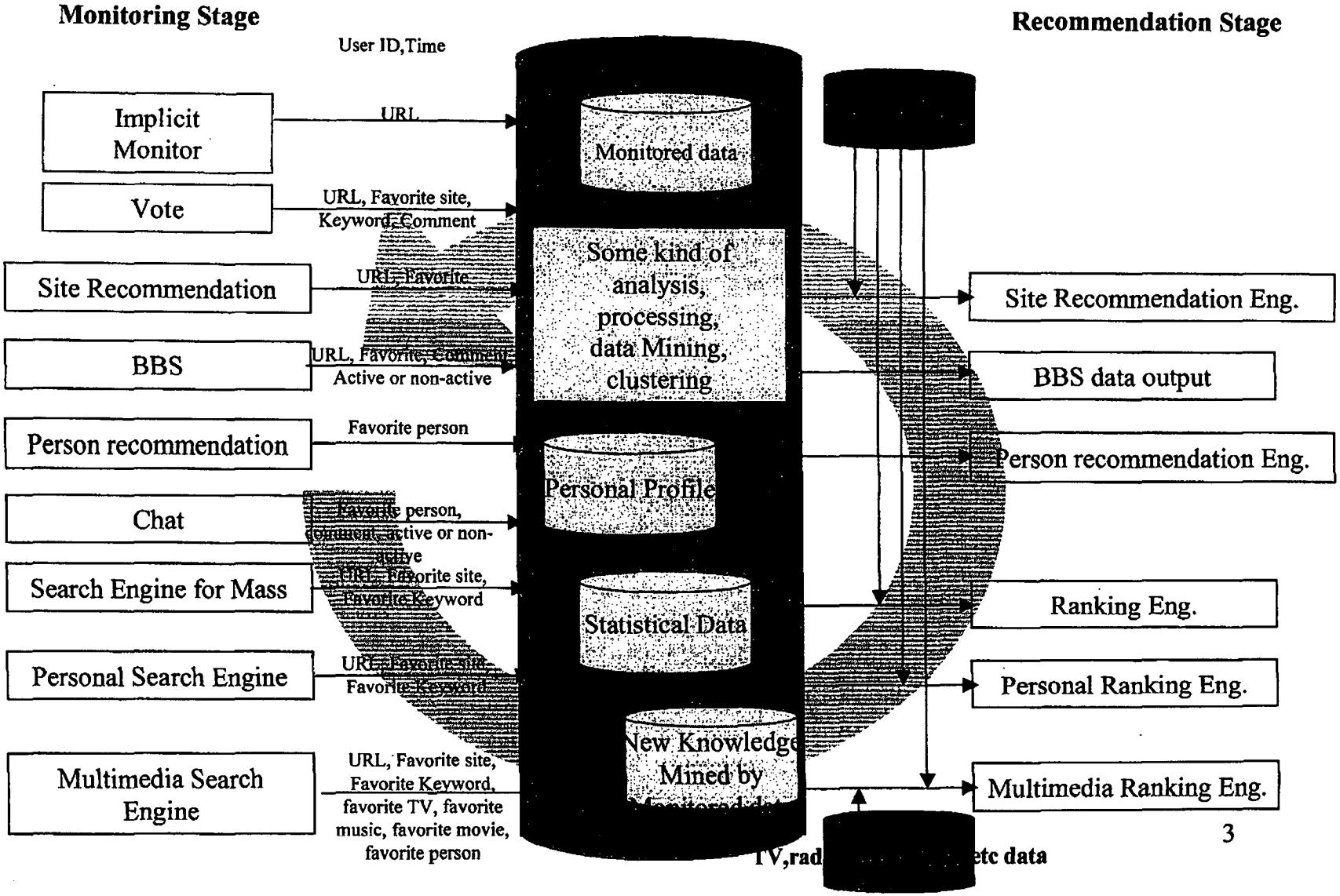


The way of Communication between our client software, IE and windowsOS

IE implement the COM interface through which outer program carry out IE's command or refer to inside status and inside variables. Our software get those information through COM interface of IE



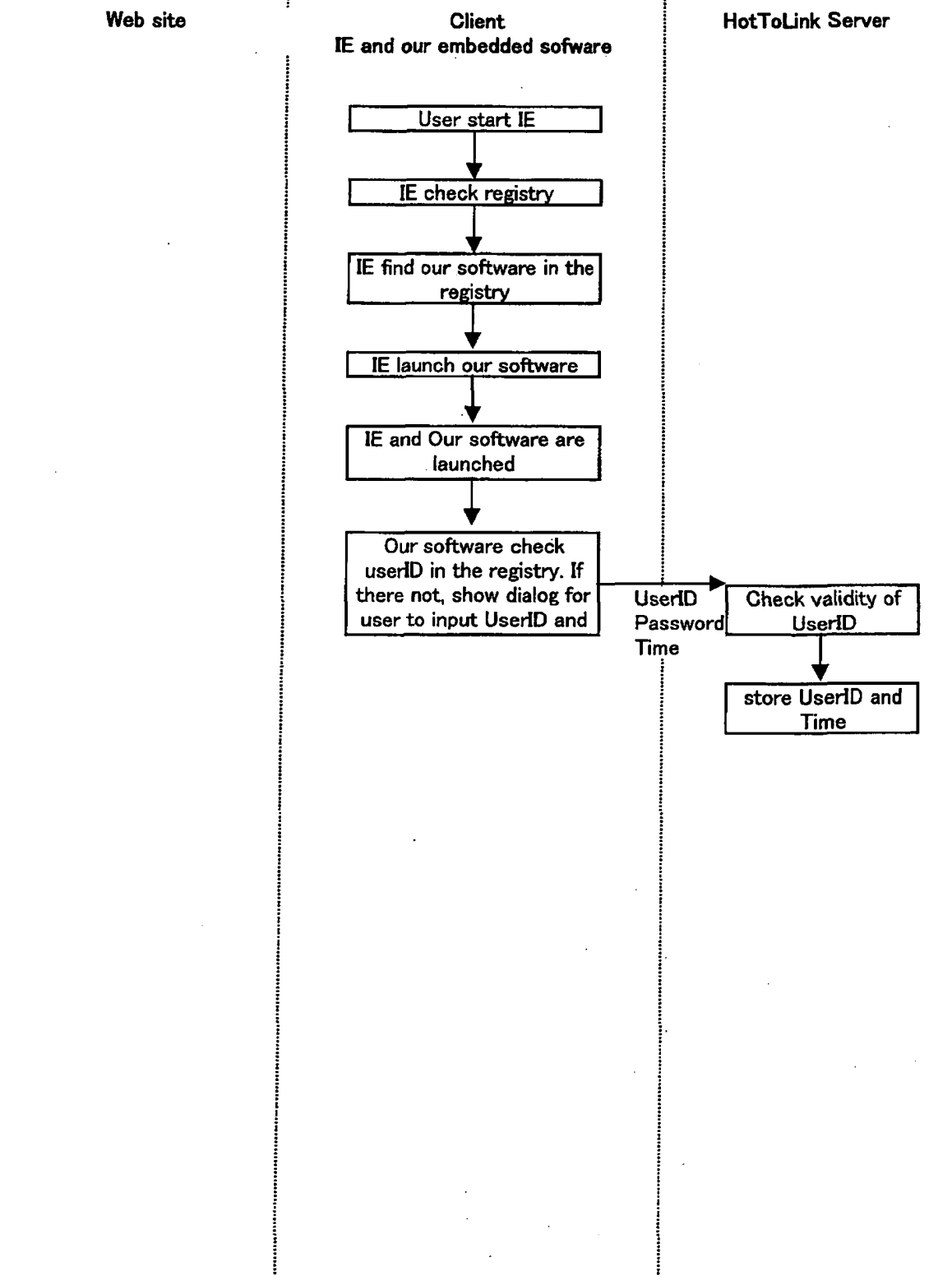
Monitoring and Recommendation and its repetition

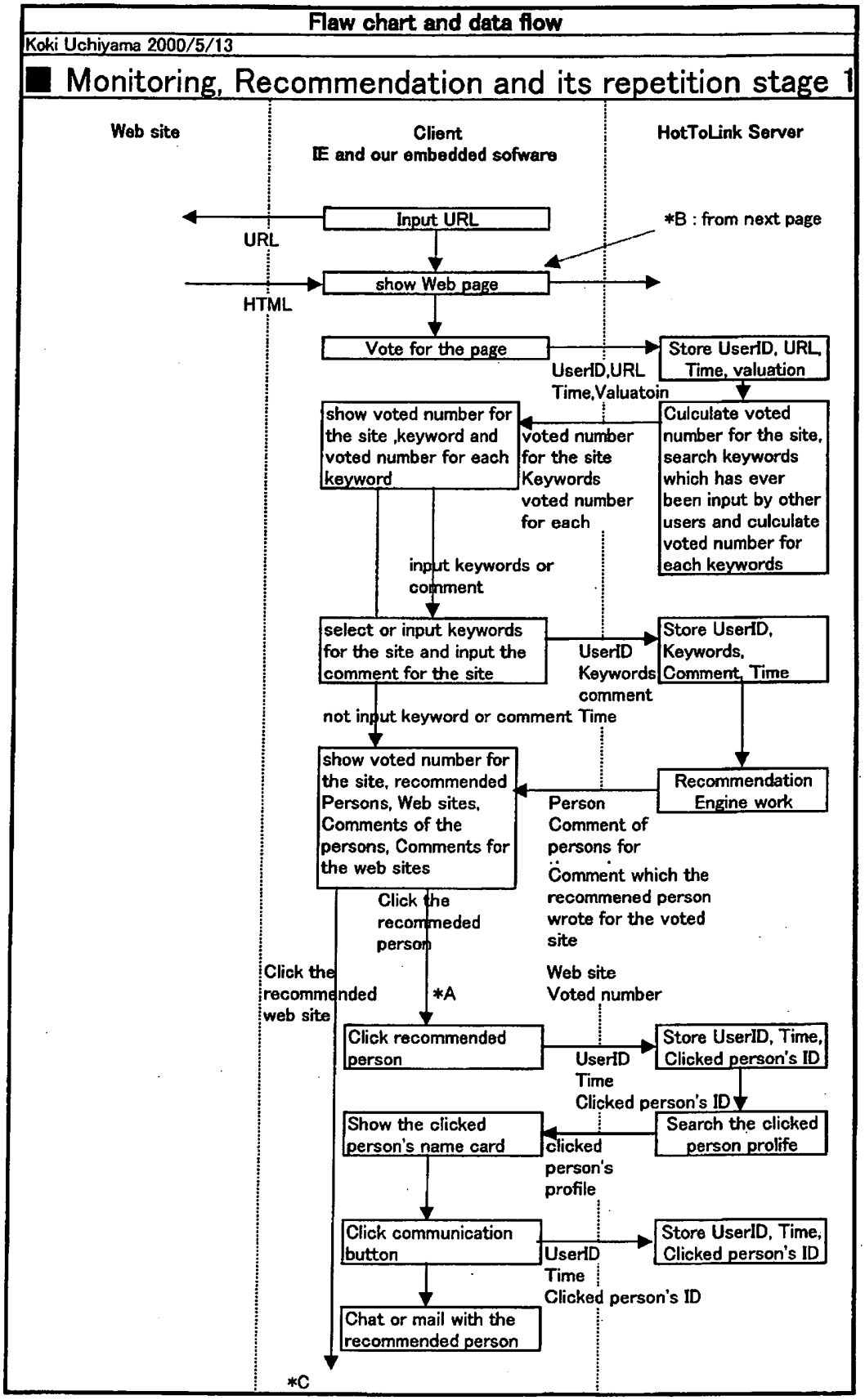


Flaw chart and data flow

Koki Uchiyama 2000/5/13

Launch and Log-in stage

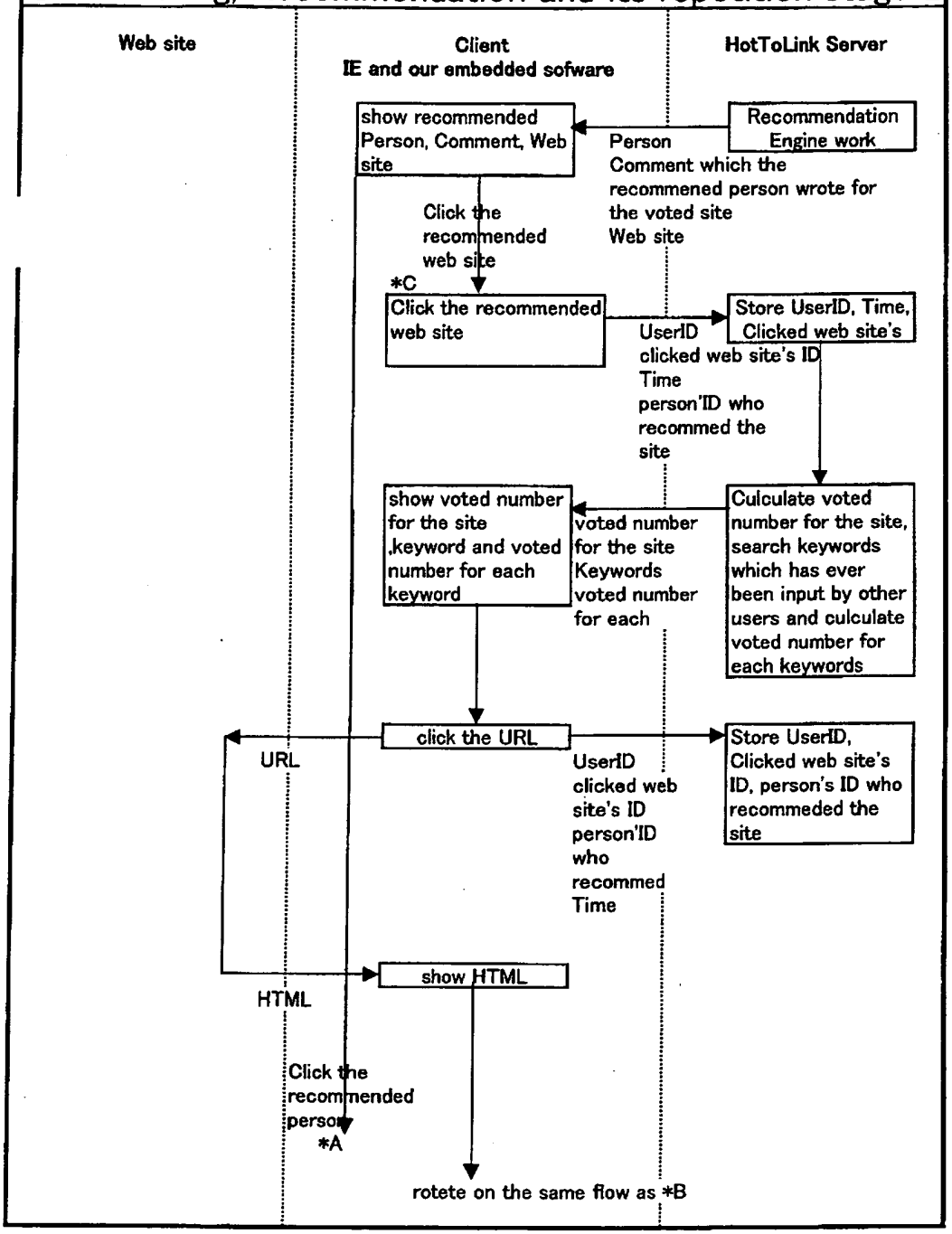


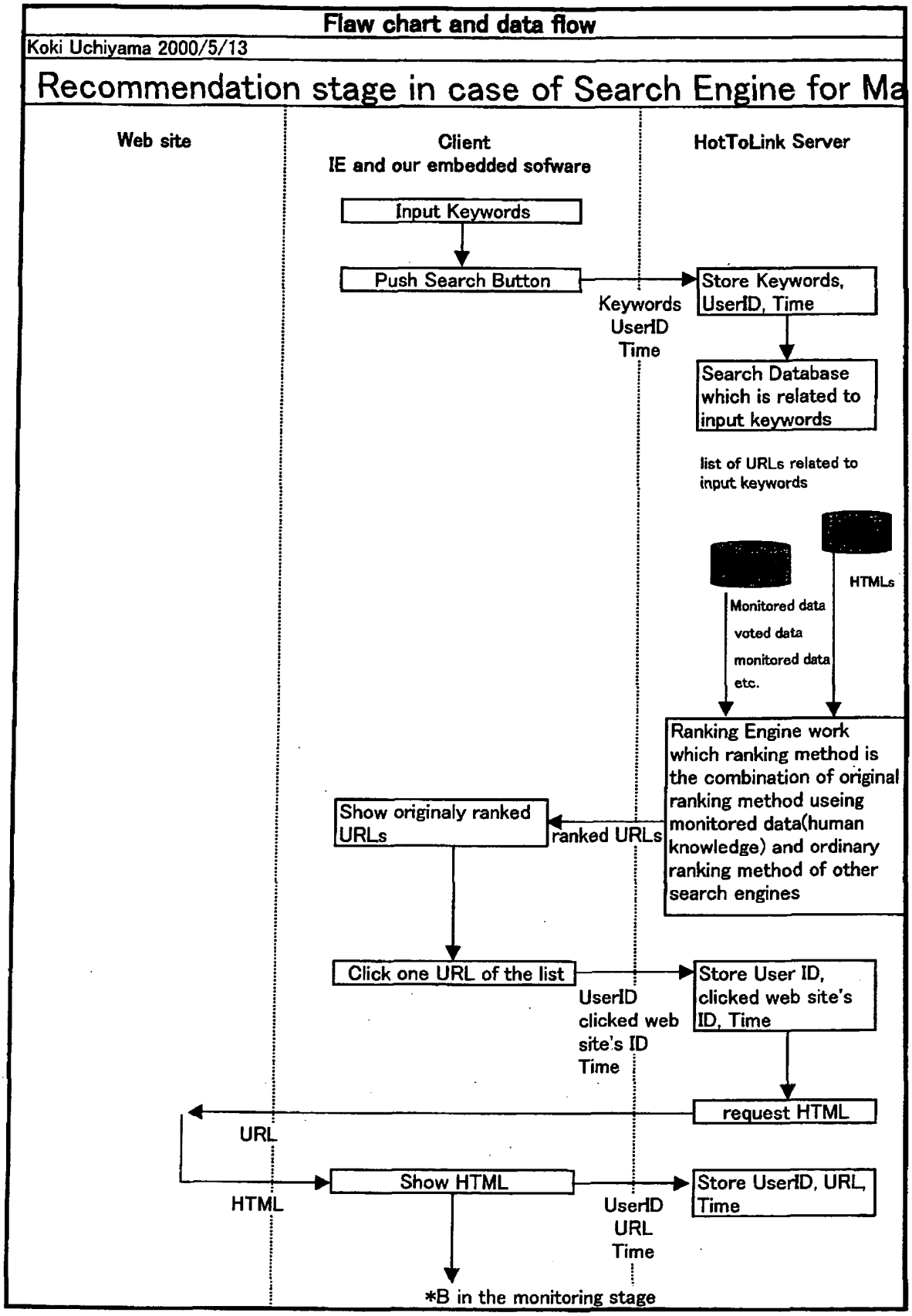

Flaw chart and data flow
Koki Uchiyama 2000/5/13
Monitoring, Recommendation and its repetition stage 1
Web site
Client
IE and our embedded sofware
HotToLink Server
Input URL
URL
*B : from next page
show Web page
HTML
Vote for the page
Store UserID, URL, Time, valuation
UserID,URL
Time,Valuatoin
show voted number for the site ,keyword and voted number for each keyword
voted number for the site
Keywords voted number for each
Culculate voted number for the site, search keywords which has ever been input by other users and culculate voted number for each keywords
input keywords or comment
select or input keywords for the site and input the comment for the site
UserID
Keywords
comment
Store UserID, Keywords, Comment, Time
not input keyword or comment
Time
show voted number for the site, recommended Persons, Web sites, Comments of the persons, Comments for the web sites
Recommendation Engine work
Person
Comment of persons for
Comment which the recommened person wrote for the voted site
Click the recommeded person
Click the recommended web site
*A
Web site
Voted number
Click recommended person
Store UserID, Time, Clicked person's ID
UserID
Time
Clicked person's ID
Show the clicked person's name card
Search the clicked person prolife
clicked person's profile
Click communication button
Store UserID, Time, Clicked person's ID
UserID
Time
Clicked person's ID
Chat or mail with the recommended person
*C

Flaw chart and data flow

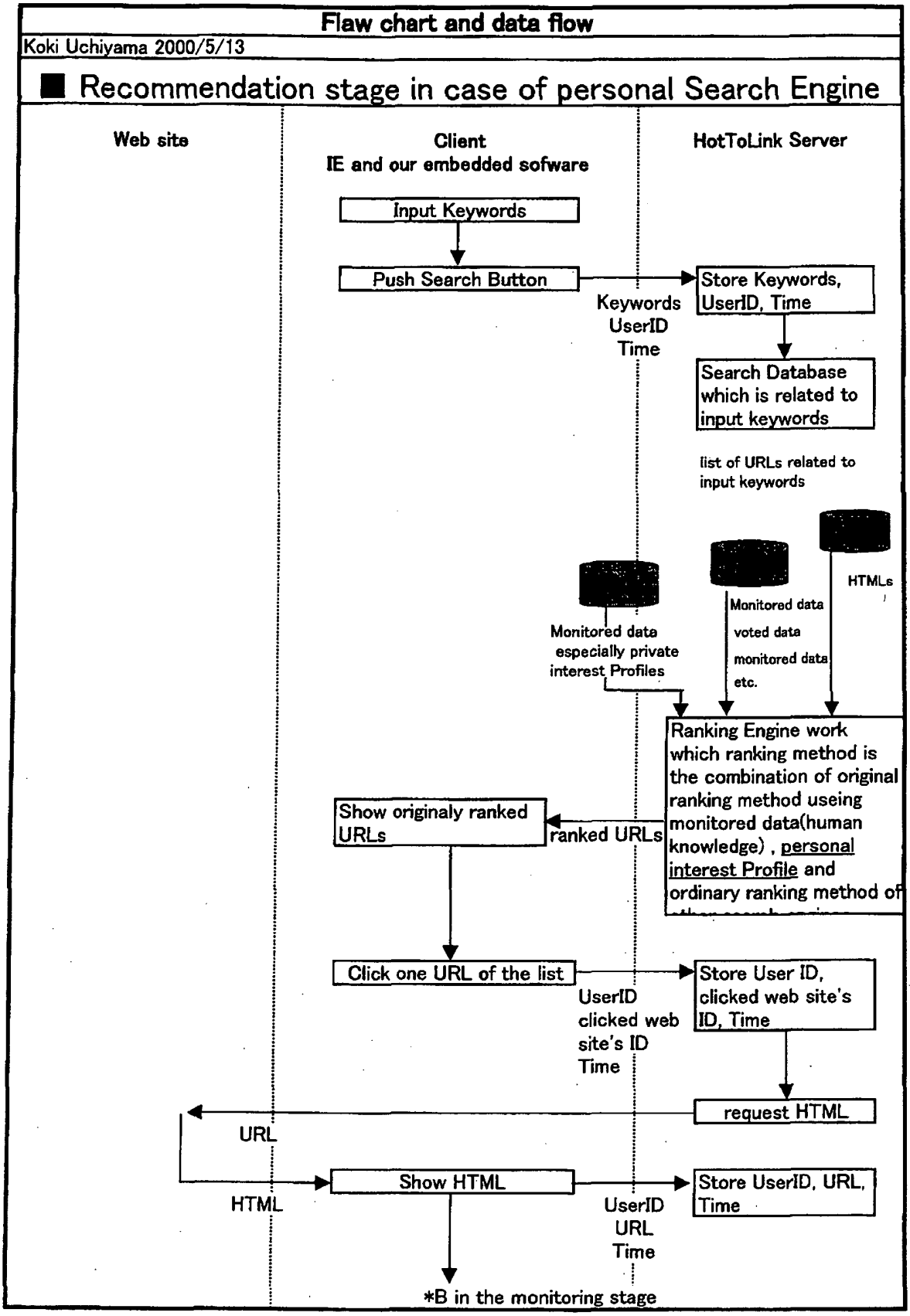
Koki Uchiyama 2000/5/13

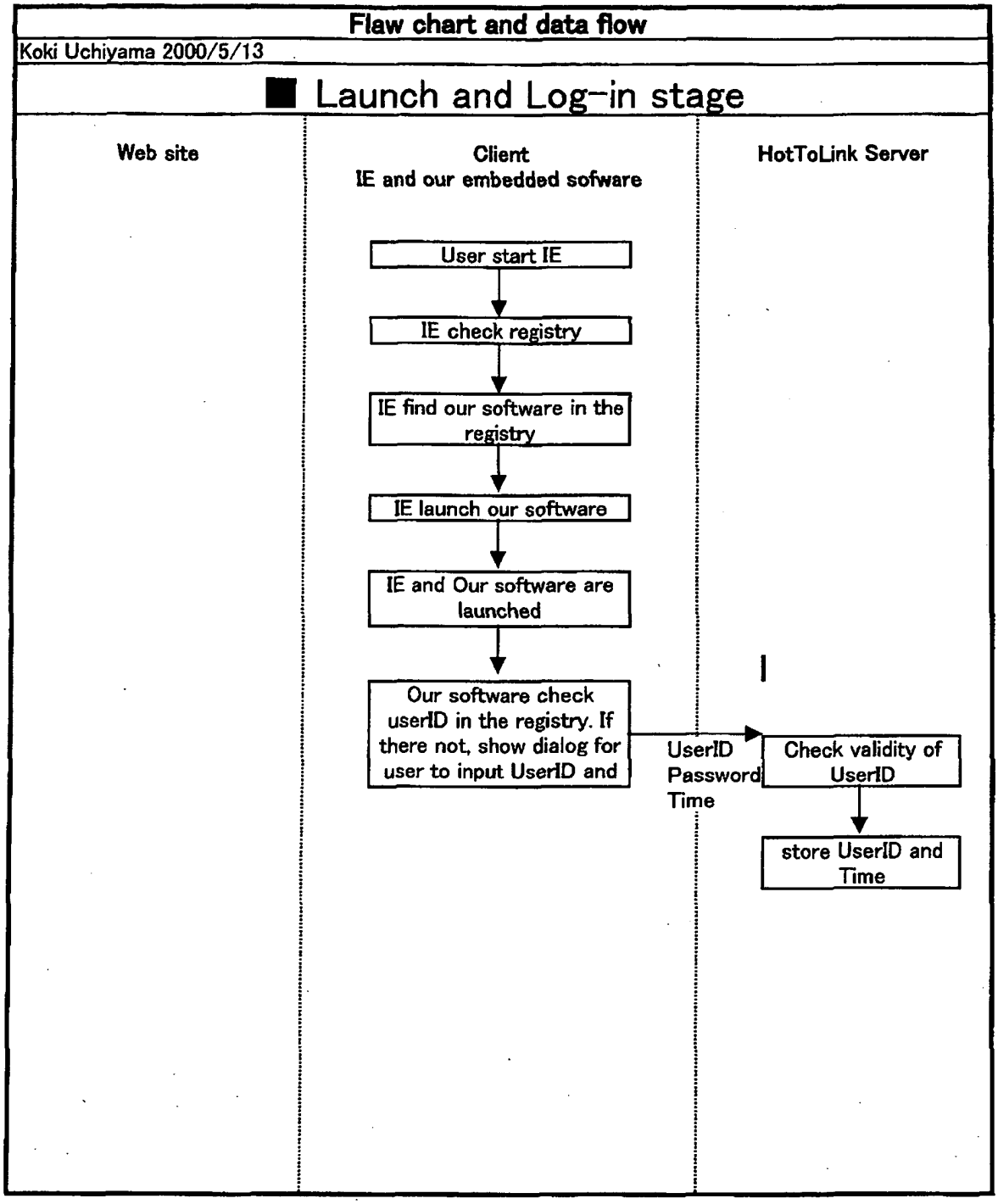
Monitoring, Recommendation and its repetition stage 2





software flow chart.xlsRecommendation(Search Engine 1)4
2000/5/19


Flaw chart and data flow
Koki Uchiyama 2000/5/13
Recommendation stage in case of personal Search Engine
Web site
Client
IE and our embedded sofware
HotToLink Server
Input Keywords
Push Search Button
Keywords
UserID
Time
Store Keywords, UserID, Time
Search Database which is related to input keywords
list of URLs related to input keywords
HTMLs
Monitored data
voted data
monitored data
etc.
Monitored data especially private interest Profiles
Ranking Engine work which ranking method is the combination of original ranking method useing monitored data(human knowledge) , personal interest Profile and ordinary ranking method of
Show originaly ranked URLs
ranked URLs
Click one URL of the list
UserID
clicked web site's ID
Time
Store User ID, clicked web site's ID, Time
request HTML
URL
HTML
Show HTML
UserID
URL
Time
Store UserID, URL, Time
*B in the monitoring stage


Flaw chart and data flow
Koki Uchiyama 2000/5/13
Launch and Log-in stage
Web site
Client
IE and our embedded sofware
HotToLink Server
User start IE
IE check registry
IE find our software in the registry
IE launch our software
IE and Our software are launched
Our software check userID in the registry. If there not, show dialog for user to input UserID and
UserID
Password
Time
Check validity of UserID
store UserID and Time

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DIRECT DIAL
(650) 463-4600

May 30, 2000

Our Ref.: CP1073

Mr. Koki Uchiyama
AXIA Yoyogi 601
1-58-2 Yoyogi, Shibuya
Tokyo, 151-0053
Japan

Re: Filing of Provisional U.S. Patent Application
Title: OPEN RECOMMENDATION SYSTEM USING OPEN KNOWLEDGE BASE BUILT BY DISTRIBUTED MONITORING SYSTEM
Due Date: May 30, 2001

Dear Uchiyama-san:

In accordance with your instructions, we filed the above-referenced Provisional Application in the United States Patent and Trademark Office on May 30, 2000. Enclosed herewith is a copy of our correspondence to the U.S. Patent and Trademark Office, as well as a copy of the application as filed. We also enclose our debit note for services and disbursements.

Our debit note for services is somewhat higher than anticipated. I believe this to be for a couple of reasons. First, there was a considerably larger number of application drafts exchanged than we customarily expect for provisional applications. I understand that you may feel that the additional effort resulted from what you believed to be our inadequate understanding of your invention. After considerable consultation with Zen and Victor, I am satisfied that we understood the invention as it was presented to us. I feel as though some aspects of the invention were described differently to us over the course of our work on the application.

To the extent that our original draft -- which, as we explained when we sent, was done in a tremendous rush, to give you and Zen something to review just a few days after we met -- may not have reflected adequately the items you wanted to have described, I have reduced our service charges by $3,150.

I also believe that the great majority of the work we have done on this provisional application will give us a good running start when it comes time to prepare the non-provisional application.

If you have any questions about this debit note, please do not hesitate to contact me.

Please note that the non-extendible date for filing a non-provisional U.S. Patent Application based on the above-identified Provisional Application, as well as any corresponding non-U.S. counterpart applications, is May 30, 2001.

Thank you for entrusting this matter to us and for providing us the opportunity to be of service. We look forward to working with you in the future on this matter.

Very truly yours,

Frank L. Bernstein

FLB/tw
Enclosures
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